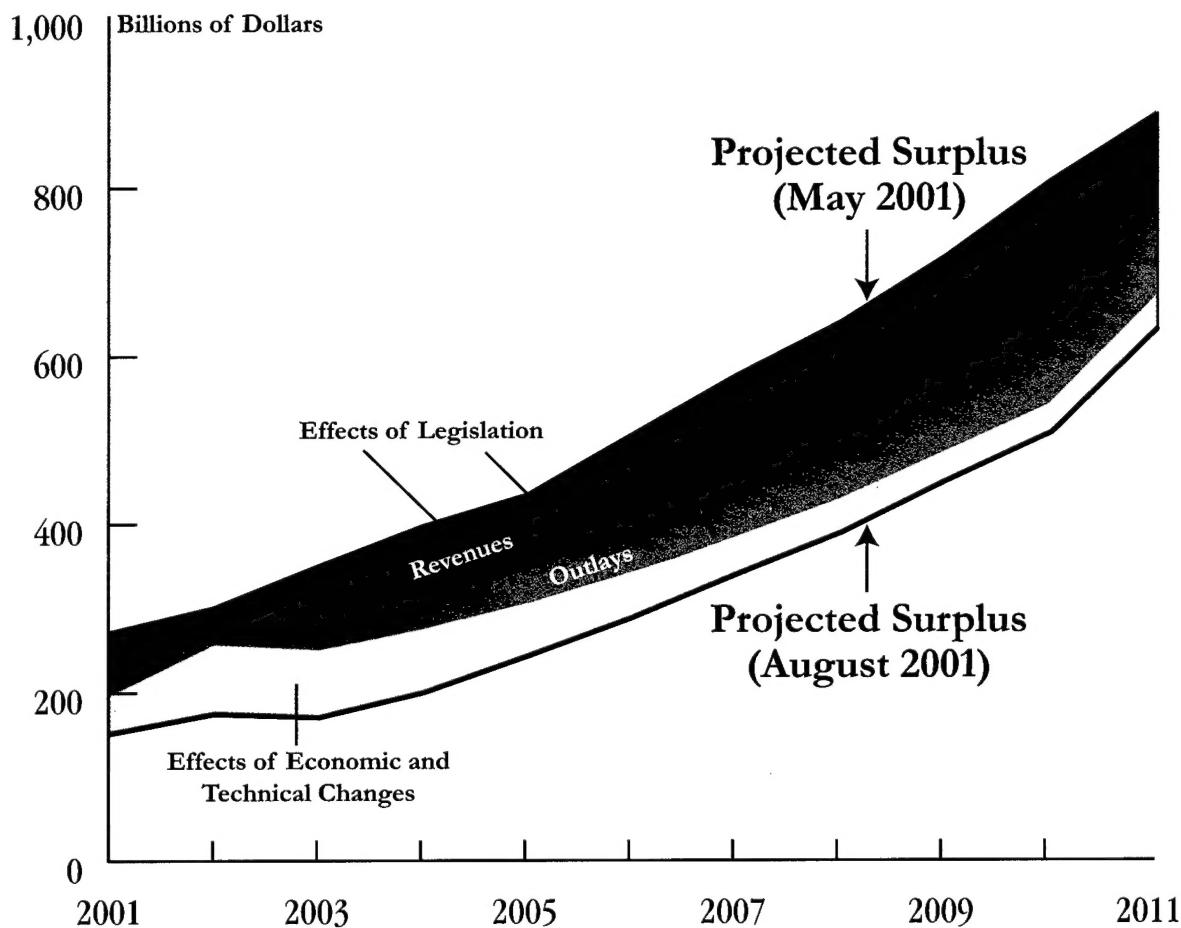


The Budget and Economic Outlook

UPDATE

Why the Projected Surplus Is Lower



A REPORT TO THE SENATE AND
HOUSE COMMITTEES ON THE BUDGET



AUGUST 2001

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THE BUDGET AND ECONOMIC OUTLOOK: AN UPDATE

The Congress of the United States
Congressional Budget Office

NOTES

Numbers in the text and tables may not add up to totals because of rounding.

Unless otherwise indicated, all years referred to in Chapter 2 are calendar years, and all years in other chapters and appendixes are fiscal years.

Some of the figures in Chapter 2 use shaded vertical bars to indicate periods of recession. The bars extend from the peak to the trough of each recession.

Data for real gross domestic product are based on chained 1996 dollars.

Preface

This volume is one of a series of reports on the state of the budget and the economy that the Congressional Budget Office (CBO) issues each year. It satisfies the requirement of section 202(e) of the Congressional Budget Act of 1974 for CBO to submit to the Committees on the Budget periodic reports about fiscal policy and to provide five-year baseline projections of the federal budget. In accordance with CBO's mandate to provide impartial analysis, the report contains no recommendations.

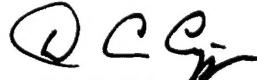
The baseline spending projections were prepared by the staff of the Budget Analysis Division under the supervision of Robert Sunshine, Peter Fontaine, Janet Airis, Thomas Bradley, Kim Cawley, Paul Cullinan, Jeffrey Holland, and Jo Ann Vines. The revenue estimates were prepared by the staff of the Tax Analysis Division under the supervision of Thomas Woodward, Mark Booth, and David Weiner.

The economic outlook presented in Chapter 2 was prepared by the Macroeconomic Analysis Division under the direction of Robert Dennis. John F. Peterson, Robert Arnold, and Eric Warasta carried out the economic forecast and projections. David Brauer, Ufuk Demiroglu, Douglas Hamilton, Juann Hung, Kim Kowalewski, Mark Lasky, Angelo Mascaro, Shinichi Nishiyama, Benjamin Page, Frank Russek, John Sturrock, and Christopher Williams contributed to the analysis. John McMurray and Eric Warasta provided research assistance.

CBO's Panel of Economic Advisers commented on an early version of the economic forecast underlying this report. Members of the panel are Andrew Abel, Alan J. Auerbach, Michael Boskin, Barry P. Bosworth, Robert Dederick, William C. Dudley, Martin Feldstein, Robert J. Gordon, Robert E. Hall, N. Gregory Mankiw, Allan Meltzer, William Niskanen, William D. Nordhaus, June E. O'Neill, Rudolph Penner, James Poterba, Michael Prell, Robert Reischauer, Joel Slemrod, and Martin B. Zimmerman. Richard Berman attended the panel's meeting as a guest. Although those outside advisers provided considerable assistance, they are not responsible for the contents of this report.

Mark Booth and Ellen Hays wrote Chapter 1. Robert Shackleton was the lead author for Chapter 2. Barry Blom wrote Appendix A, and Adaeze Enekwechi wrote Appendix C. Barry Blom and Felix LoStracco wrote the summary.

Christine Bogusz, Leah Mazade, John Skeen, and Christian Spoor edited the report. Marion Curry, Linda Lewis Harris, Denise Jordan, Dorothy Kornegay, and Simone Thomas assisted in its preparation. Kathryn Winstead prepared the report for publication, Lenny Skutnik printed the initial copies, and Annette Kalicki prepared the electronic versions for CBO's Web site.



Dan L. Crippen
Director

August 2001

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Summary

Recently enacted legislation and the continued sluggish behavior of the U.S. economy have reduced the projected federal budget surpluses for fiscal year 2001 and future years. The Congressional Budget Office (CBO) projects that the total budget surplus in fiscal year 2001 will be \$153 billion—\$122 billion lower than CBO estimated in May. About two-thirds of the decrease results from new legislation; one-third comes from a weaker economy and other factors. Despite that drop, if the \$153 billion surplus materializes in 2001, it will equal 1.5 percent of gross domestic product (GDP), the second largest surplus as a share of the economy since 1951.

With a smaller total surplus, CBO now projects a small on-budget deficit for this year. (The on-budget accounts exclude the spending and revenues of Social Security and the Postal Service.) If current tax and spending policies are maintained and the economy performs as CBO estimates, CBO projects

small deficits or surpluses in on-budget accounts for the next four years; however, steadily increasing on-budget surpluses reemerge by the middle of the decade. The projected surpluses would allow all public debt that is available for redemption to be retired by 2010.

The Budget Outlook

For the five years from 2002 through 2006, CBO projects surpluses totaling \$1.1 trillion, which come almost entirely from off-budget accounts (see Summary Table 1). For the 10-year period through 2011, CBO estimates that under current policies, surpluses will total \$3.4 trillion. Social Security makes up about three-quarters of that total. In 2010, the on-budget surplus reaches 1 percent of GDP, and the

Summary Table 1.
The Outlook for the Budget Under Current Policies (By fiscal year, in billions of dollars)

	Actual 2000	2001	2002	2003	2004	2005	2006	Total, 2002- 2006	Total, 2007- 2011	Total, 2002- 2011
On-Budget Surplus or Deficit (-)	87	-9	2	-18	-3	21	47	49	799	847
Off-Budget Surplus ^a	<u>150</u>	<u>162</u>	<u>174</u>	<u>190</u>	<u>204</u>	<u>224</u>	<u>242</u>	<u>1,034</u>	<u>1,516</u>	<u>2,549</u>
Total Surplus	236	153	176	172	201	244	289	1,082	2,314	3,397

SOURCE: Congressional Budget Office.

a. Off-budget surpluses comprise surpluses in the Social Security trust funds as well as the net cash flow of the Postal Service.

Summary Table 2.**Changes in CBO's Baseline Projections of the Surplus Since May 2001 (By fiscal year, in billions of dollars)**

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	Total, 2002- 2006	Total, 2002- 2011
Total Surplus as Projected in May 2001	275	304	353	400	437	508	578	641	718	806	883	2,002	5,629
Changes													
Legislative													
Tax act ^a	-74	-38	-91	-108	-107	-135	-152	-160	-168	-187	-130	-479	-1,275
Other ^b	-7	-10	-8	-7	-8	-8	-8	-8	-8	-9	-9	-41	-83
Debt service ^c	*	-4	-9	-16	-23	-31	-41	-53	-65	-79	-92	-84	-413
Subtotal	-81	-52	-107	-131	-138	-174	-201	-221	-241	-274	-230	-603	-1,771
Economic	-25	-48	-54	-50	-40	-31	-23	-16	-9	-6	-5	-224	-283
Technical ^d	-16	-27	-20	-18	-15	-13	-13	-16	-17	-18	-19	-93	-177
Total	-122	-128	-182	-198	-192	-219	-238	-253	-268	-299	-254	-920	-2,232
Total Surplus as Projected in August 2001	153	176	172	201	244	289	340	389	450	507	628	1,082	3,397

SOURCE: Congressional Budget Office.

NOTE: * = less than \$500 million.

- a. The Economic Growth and Tax Relief Reconciliation Act of 2001 will reduce revenues by \$1,186 billion and increase outlays by \$88 billion between 2002 and 2011.
- b. Mostly the 2001 Supplemental Appropriations Act, along with recent legislation that provides additional funds in 2001 for agricultural producers.
- c. Reflects only the change in debt-service costs resulting from legislative actions. Other effects on debt-service costs are included under economic and technical changes.
- d. Changes not directly driven by new legislation or by changes in the components of CBO's economic forecast.

total surplus grows to 3 percent of GDP. Those estimates should be viewed cautiously, however, because future economic developments, technical estimating errors, and future legislative actions could produce substantial deviations.¹

Total surpluses for the 2002-2011 period are \$2.2 trillion less than CBO projected in May, when it last published its budget baseline (see Summary Table 2). Legislative changes account for \$1.8 trillion of that amount.

The Economic Growth and Tax Relief Reconciliation Act of 2001 (Public Law 107-16) is estimated to reduce revenues by \$70 billion in 2001 and nearly \$1.2 trillion over the 2002-2011 period. That law changed numerous tax provisions, including establishing a 10 percent tax bracket, lowering income tax rates, increasing tax credits for children, repealing the estate tax, lessening the so-called marriage penalty, raising the limits on contributions to retirement accounts, and enhancing education incentives. In addition, the law increases outlays for refundable tax credits by \$4 billion in 2001 and \$88 billion between 2002 and 2011.

1. For a more detailed discussion of uncertainties in forecasting and their implications for budget projections, see Chapter 5 of Congressional Budget Office, *The Budget and Economic Outlook: Fiscal Years 2002-2011* (January 2001).

Other legislation will also increase projected outlays through 2011. Providing additional assis-

tance to farmers will increase spending by \$5.5 billion in 2001, and the 2001 Supplemental Appropriations Act is projected to boost spending by \$83 billion from 2002 through 2011. As a result of all legislative changes, interest payments will increase by \$413 billion over the next 10 years, CBO estimates.

Lower projections of economic growth over the next few years, along with other revisions to the economic forecast, will diminish surpluses by \$0.3 trillion between 2002 and 2011, according to CBO's projections. (Those revisions reflect changes in the economic outlook since January, when CBO last updated its economic assumptions.) Technical changes (those not driven by new legislation or by changes in the components of CBO's economic forecast) further reduce surpluses by nearly \$200 billion.

The Economic Outlook

CBO has revised its economic forecast to reflect the weakness in the U.S. economy during the first half of 2001. Although economic growth has slowed nearly to a standstill, CBO believes that the economy will narrowly avoid recession and recover gradually next year. CBO now expects that the levels of both nominal and real (inflation-adjusted) GDP will be lower in 2001 and 2002 than it anticipated in January. CBO also has raised its estimates of the unemployment rate and long-term interest rates for the next few years and lowered its estimate of short-term interest rates. (CBO's economic forecast does not incorporate the revisions in GDP and related measures that were published in the Bureau of Economic Analysis' national income and product accounts at the end of July, after CBO had completed its forecast. Incorporating those revisions could move budget projections in either direction but probably not by very much.)

CBO's current forecast assumes that growth of real GDP will average 1.7 percent this calendar year

and 2.6 percent next year—for both years, those rates are about three-quarters of a percentage point lower than CBO estimated in January (see Summary Table 3). Those forecasts are very uncertain, though, and growth that is significantly slower—or faster—cannot be ruled out.

Inflation, as measured by growth in the consumer price index for all urban consumers, is 0.4 percentage points higher for 2001 and 0.2 percentage points lower for 2002 than the estimates in the January forecast.

Short-term interest rates are projected to be lower in the next few years than CBO previously anticipated, but long-term rates are expected to be higher. Interest rates on three-month Treasury bills are forecast to be about a full percentage point lower for both 2001 and 2002 than the levels estimated in January. However, the interest rate paid on 10-year Treasury notes is projected to be between 0.3 and 0.4 percentage points higher than previously anticipated.

CBO does not forecast fluctuations of the economy beyond two years. Instead, it extends historical patterns in the factors—increases in the labor force, rising productivity, and the rate of national saving—that underlie the growth of potential GDP. After incorporating those patterns, CBO makes economic projections that extend three to 10 years out.

For 2003 through 2011, CBO projects that growth of nominal GDP will average 5.2 percent a year and that growth of real GDP will average 3.2 percent—levels slightly above those estimated in January. According to CBO's projections, inflation in the 2003-2011 period will average 2.5 percent, which is similar to the rate that was anticipated last winter. Interest rates over the period will average 4.9 percent for three-month Treasury bills and 5.8 percent for 10-year Treasury notes, CBO projects—figures that are also similar to January's.

Summary Table 3.
CBO's Current and Previous Economic Projections for Calendar Years 2001 Through 2011

	<u>Forecast</u>		<u>Projected Annual Average</u>	
	2001	2002	2003-2006	2007-2011
Nominal GDP (Billions of dollars)				
August 2001	10,366	10,876	13,355 ^a	17,145 ^b
January 2001	10,446	11,029	13,439 ^a	17,132 ^b
Nominal GDP (Percentage change)				
August 2001	4.0	4.9	5.3	5.1
January 2001	4.7	5.6	5.1	5.0
Real GDP (Percentage change)				
August 2001	1.7	2.6	3.2	3.2
January 2001	2.4	3.4	3.1	3.1
GDP Price Index (Percentage change)				
August 2001	2.3	2.3	2.0	1.9
January 2001	2.3	2.1	1.9	1.9
Consumer Price Index ^c (Percentage change)				
August 2001	3.2	2.6	2.5	2.5
January 2001	2.8	2.8	2.6	2.5
Unemployment Rate (Percent)				
August 2001	4.6	5.2	5.2	5.2
January 2001	4.4	4.5	4.7	5.2
Three-Month Treasury Bill Rate (Percent)				
August 2001	3.9	3.8	4.9	4.9
January 2001	4.8	4.9	4.9	4.9
Ten-Year Treasury Note Rate (Percent)				
August 2001	5.3	5.6	5.8	5.8
January 2001	4.9	5.3	5.6	5.8

SOURCE: Congressional Budget Office.

NOTES: The August 2001 values for GDP and its components are based on data from the Bureau of Economic Analysis' national income and product accounts before the annual revision in July. Incorporating those revisions, which occurred after CBO had completed its forecast, could move budget projections in either direction but probably not by very much.

Percentage changes are year over year.

Year-by-year economic projections for calendar and fiscal years 2001 through 2011 appear in Appendix B.

a. Level of GDP in 2006.

b. Level of GDP in 2011.

c. The consumer price index for all urban consumers.

Chapter One

The Budget Outlook

In the Congressional Budget Office's (CBO's) new baseline projections, the federal budget will run a total surplus equal to between 1.5 percent and 2.2 percent of gross domestic product (GDP) in each of the next five fiscal years, assuming that current tax and spending policies remain in place and that the economy performs as CBO anticipates (see Table 1-1). By the end of the decade, such surpluses are projected to exceed 3 percent of GDP.

Through fiscal year 2004, however, total surpluses will result almost entirely from off-budget accounts (which mainly include the inflows and outflows of the Social Security trust funds). Although the distinction between on- and off-budget surpluses is unimportant from an overall economic perspective, it has become a key part of the budget debate. Under current policies, CBO is projecting small on-budget surpluses or deficits in 2001 through 2005.

Table 1-1.
The Budget Outlook Under Current Policies (By fiscal year, in billions of dollars)

	Actual 2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	Total, 2002- 2006	Total, 2002- 2011
On-Budget Surplus or Deficit (-)	87	-9	2	-18	-3	21	47	78	106	147	184	283	49	847
Off-Budget Surplus ^a	150	162	174	190	204	224	242	262	283	303	323	345	1,034	2,549
Total Surplus	236	153	176	172	201	244	289	340	389	450	507	628	1,082	3,397
Memorandum: Medicare Hospital Insurance Surplus ^b	30	29	38	41	42	42	45	43	43	42	39	31	206	404
Total Surplus as a Percentage of GDP	2.4	1.5	1.6	1.5	1.7	1.9	2.2	2.5	2.7	2.9	3.1	3.7	1.8	2.5

SOURCE: Congressional Budget Office.

a. Off-budget surpluses comprise surpluses in the Social Security trust funds as well as the net cash flow of the Postal Service.

b. Medicare's Hospital Insurance Trust Fund is on-budget.

Table 1-2.
CBO's Baseline Budget Projections (By fiscal year)

	Actual 2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	Total, 2002- 2011
In Billions of Dollars													
Revenues													
Individual income taxes	1,004	1,015	1,039	1,079	1,123	1,175	1,223	1,286	1,360	1,440	1,528	1,717	12,970
Corporate income taxes	207	149	210	195	215	247	253	265	278	292	307	321	2,584
Social insurance taxes	653	694	727	761	794	838	880	923	967	1,016	1,066	1,119	9,092
Other	161	152	158	160	175	178	187	189	196	204	203	185	1,833
Total	2,025	2,011	2,134	2,196	2,307	2,438	2,543	2,663	2,801	2,952	3,103	3,341	26,479
On-budget	1,545	1,503	1,602	1,638	1,723	1,822	1,897	1,985	2,089	2,204	2,319	2,518	19,795
Off-budget	481	507	532	558	584	616	647	679	712	748	785	823	6,684
Outlays													
Discretionary spending	615	647	689	717	737	759	774	789	812	833	853	878	7,842
Mandatory spending	1,032	1,092	1,181	1,243	1,313	1,387	1,454	1,531	1,625	1,724	1,831	1,961	15,249
Offsetting receipts	-81	-89	-92	-109	-112	-107	-112	-119	-125	-132	-139	-148	-1,196
Net interest	223	207	179	174	168	155	139	121	101	78	58	50	1,223
Proceeds earned on the balance of uncommitted funds ^a	0	0	0	0	0	0	0	0	0	0	-7	-29	-36
Total	1,789	1,858	1,958	2,024	2,106	2,194	2,254	2,323	2,413	2,502	2,596	2,713	28,083
On-budget	1,458	1,512	1,600	1,656	1,726	1,802	1,850	1,906	1,983	2,057	2,134	2,235	18,948
Off-budget	331	346	358	369	380	392	405	417	430	445	462	478	4,135
Surplus or Deficit (-)	236	153	176	172	201	244	289	340	389	450	507	628	3,397
On-budget	87	-9	2	-18	-3	21	47	78	106	147	184	283	847
Off-budget	150	162	174	190	204	224	242	262	283	303	323	345	2,549
Memorandum:													
Gross Domestic Product	9,824	10,263	10,733	11,322	11,913	12,533	13,187	13,870	14,584	15,333	16,117	16,935	136,525

(Continued)

In its previous budget projections, published in May, CBO estimated large and growing baseline surpluses—both on- and off-budget—for the 2002-2011 period.¹ Since then, however, projected surpluses for that 10-year period have been reduced by \$2.2 trillion (from \$5.6 trillion to \$3.4 trillion). Most of the reduction stems from two sources: recent legislation and weakness in the economy. The Economic Growth and Tax Relief Reconciliation Act of 2001, which the President signed into law on June 7, is estimated to reduce revenues by a total of \$1.2 trillion from 2002 through 2011. That legislation, along with the 2001 Supplemental Appropriations Act and a new law providing assistance to farmers, also added about \$200 billion to projected baseline outlays. In addi-

tion, the economy has slowed more than CBO anticipated. Lower projections of growth over the next few years, along with other revisions to the economic forecast, are expected to diminish surpluses by almost \$300 billion between 2002 and 2011. Those revisions reflect changes in the economy since January, when CBO last updated its economic assumptions.

Because revenues will be lower and spending higher than previously projected, the Department of the Treasury will not be able to pay down the debt as quickly. Added debt-service costs in the new baseline projections total nearly \$600 billion over the 10-year period. Nevertheless, CBO projects that under current policies, all debt available for redemption will be retired by 2010. (In May, CBO estimated the comparable date to be 2006.)

1. See Congressional Budget Office, *An Analysis of the President's Budgetary Proposals for Fiscal Year 2002* (May 2001).

Table 1-2.
Continued

	Actual 2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	Total, 2002- 2011 ^b
As a Percentage of GDP													
Revenues													
Individual income taxes	10.2	9.9	9.7	9.5	9.4	9.4	9.3	9.3	9.3	9.4	9.5	10.1	9.5
Corporate income taxes	2.1	1.5	2.0	1.7	1.8	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9
Social insurance taxes	6.6	6.8	6.8	6.7	6.7	6.7	6.7	6.7	6.6	6.6	6.6	6.6	6.7
Other	1.6	1.5	1.5	1.4	1.5	1.4	1.4	1.4	1.3	1.3	1.3	1.1	1.3
Total	20.6	19.6	19.9	19.4	19.4	19.5	19.3	19.2	19.2	19.3	19.3	19.7	19.4
On-budget	15.7	14.6	14.9	14.5	14.5	14.5	14.4	14.3	14.3	14.4	14.4	14.9	14.5
Off-budget	4.9	4.9	5.0	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9
Outlays													
Discretionary spending	6.3	6.3	6.4	6.3	6.2	6.1	5.9	5.7	5.6	5.4	5.3	5.2	5.7
Mandatory spending	10.5	10.6	11.0	11.0	11.0	11.1	11.0	11.0	11.1	11.2	11.4	11.6	11.2
Offsetting receipts	-0.8	-0.9	-0.9	-1.0	-0.9	-0.9	-0.9	-0.9	-0.9	-0.9	-0.9	-0.9	-0.9
Net interest	2.3	2.0	1.7	1.5	1.4	1.2	1.1	0.9	0.7	0.5	0.4	0.3	0.9
Proceeds earned on the balance of uncommitted funds ^a	0	0	0	0	0	0	0	0	0	0	*	-0.2	*
Total	18.2	18.1	18.2	17.9	17.7	17.5	17.1	16.7	16.5	16.3	16.1	16.0	16.9
On-budget	14.8	14.7	14.9	14.6	14.5	14.4	14.0	13.7	13.6	13.4	13.2	13.2	13.9
Off-budget	3.4	3.4	3.3	3.3	3.2	3.1	3.1	3.0	2.9	2.9	2.9	2.8	3.0
Surplus or Deficit (-)	2.4	1.5	1.6	1.5	1.7	1.9	2.2	2.5	2.7	2.9	3.1	3.7	2.5
On-budget	0.9	-0.1	*	-0.2	*	0.2	0.4	0.6	0.7	1.0	1.1	1.7	0.6
Off-budget	1.5	1.6	1.6	1.7	1.7	1.8	1.8	1.9	1.9	2.0	2.0	2.0	1.9

SOURCE: Congressional Budget Office.

NOTE: * = between -0.05 percent and 0.05 percent.

- a. "Uncommitted funds" is CBO's term for the surpluses that remain each year after paying down publicly held debt available for redemption. CBO assumes that those funds, which accumulate from one year to the next, earn proceeds at a rate equal to the average interest rate projected for Treasury bills and notes.
- b. As a percentage of total GDP over the 10-year period.

CBO now estimates that this year's surplus will be \$153 billion—\$122 billion less than it projected just a few months ago. That surplus comprises an on-budget deficit of \$9 billion and an off-budget surplus of \$162 billion (see Table 1-2).² About two-thirds of

- 2. The Administration is planning a change that would shift revenues from off-budget to on-budget accounts in 2001. Currently, Social Security and Hospital Insurance payroll taxes that are withheld from paychecks are indistinguishable from individual income taxes collected at the same time. As a result, receipts from those payroll taxes are initially recorded and assigned to their respective trust funds on the basis of the Administration's estimates. Eventually, as information becomes available, the allocation of revenues to the trust funds is adjusted to make up for any shortfall or excess in the estimates. Because Social Security is off-budget, that later reallocation can shift revenues from off-budget to on-budget status or vice versa.

the drop in the projected surplus for 2001 results from new legislation; the rest comes from a weaker economy and various technical factors. Nevertheless, 2001 will be the fourth consecutive year of budget surpluses, an accomplishment last achieved more than 70 years ago.

In the past, such adjustments have been made to revenue figures for the current year rather than retroactively to the figures for previous years. The Administration plans to change that practice by correcting the historical record rather than lumping all of the adjustments into the current year. For 2001, such a change would increase on-budget revenues by \$5.6 billion and reduce off-budget revenues by the same amount (it would not affect the total surplus). The opposite adjustments would be made for prior fiscal years. (That \$5.6 billion figure could change later this year.) CBO's estimates in this report do not reflect the Administration's accounting change. (For more information about differences between CBO's and the Administration's projections, see Appendix C.)

Looking farther ahead, only the recent legislation has had a significant effect on CBO's assessment of the budget outlook over 10 years. The current economic slowdown affects projections for the next few years but very little after that. Technical changes to the budget estimates average less than \$20 billion a year.³ Even with the substantial drop in projected surpluses, CBO estimates that if current policies are continued, those surpluses will average more than 2 percent of GDP over the coming decade.

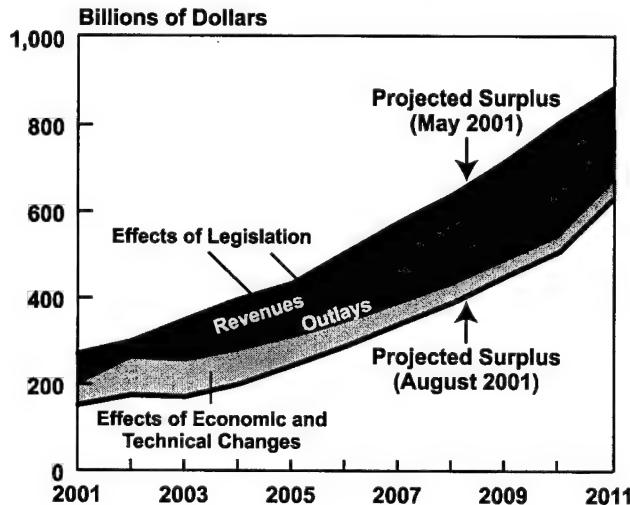
The budget projections in this report are intended to provide an objective baseline against which to measure the effects of possible changes in tax or spending policies. They are not a forecast of future budgetary policies or outcomes. Instead, they follow guidelines for budget projections set forth in law and reflect CBO's best judgment about how the economy and other factors will affect federal revenues and spending under current policies.

Because of the uncertainty surrounding CBO's baseline projections, the outlook for the budget can best be described not as a single set of numbers but as a range of possible outcomes around those numbers. That range widens as the projection extends—for example, 10-year projections are more uncertain than five-year projections. The uncertainty results from two facts. First, the U.S. economy and the federal budget are highly complex and are affected by many economic and technical factors that are difficult, if not impossible, to predict. Second, future legislation will almost certainly alter the paths of federal spending and revenues. CBO does not predict future legislation—indeed, any attempt to incorporate future legislative changes in its baseline projections would undermine their usefulness as a way to measure the effects of such changes. As a result, actual budgetary outcomes are virtually guaranteed to differ from CBO's baseline projections.

Recent Changes to the Budget Outlook

When CBO periodically revises its baseline projections, it generally attributes the changes to three causes: recently enacted legislation, shifts in the overall economic outlook, or changes in other technical factors that affect the budget. Those categorizations should be interpreted with caution, however. For example, legislative changes represent CBO's best estimates of the future effects of laws that have been enacted since its previous baseline. But in many cases, it is impossible to know whether and how those effects compare with the initial estimates. Any differences between them will most likely appear as technical reestimates in later revisions to the baseline. The distinction between economic and technical reestimates is similarly imprecise. Nevertheless, tracking and classifying reestimates of revenues and spending as either legislative, economic, or technical is helpful in understanding a changing budget outlook (see Figure 1-1).

Figure 1-1.
Why CBO's Projections of the Surplus Have Declined Since May (By fiscal year)



SOURCE: Congressional Budget Office.

3. Technical changes are ones not directly driven by new legislation or by changes in the components of CBO's economic forecast.

Since May, CBO's projections of revenues for the 2002-2011 period have declined by \$1.4 trillion, largely as the result of legislation (see Table 1-3). Projected outlays for the 10-year period have risen by \$0.8 trillion, primarily because of legislation and changes in the economic forecast.

The Effects of Recent Legislation on Revenue Projections

The Economic Growth and Tax Relief Reconciliation Act of 2001 (Public Law 107-16) provides for significant changes in tax law over the coming decade. The Joint Committee on Taxation estimates that P.L. 107-16 will directly reduce surpluses between 2001 and 2011 by about \$1.35 trillion from the levels projected under prior law (see Table 1-4 on page 8). Most of that reduction in the surplus—nearly \$1.26 trillion—comes from lower revenues; the other \$92 billion comes from additional spending for refundable tax credits. Those estimates take into account a wide range of effects on the behavior of taxpayers, although they do not incorporate the potential macroeconomic effects of the law (for more details, see Box 2-3 in Chapter 2).

The new tax legislation accounts for most of the change in CBO's projection of revenues. For example, federal revenues in 2001 are now expected to total just over \$2.0 trillion, about \$104 billion less than CBO forecast in May. Approximately \$70 billion of that reduction is attributable to P.L. 107-16. Projected revenue losses are lower in 2002 because the law shifts some corporate tax payments from 2001 to 2002. After that, revenue losses from the legislation begin growing again, reaching \$100 billion in 2005 and \$176 billion in 2010. For the entire 2002-2011 period, CBO's baseline revenue projections have dropped by \$1.4 trillion since May, with P.L. 107-16 accounting for nearly \$1.2 trillion of the decline. (Economic factors and technical changes each account for \$0.1 trillion.)

Many of the provisions in P.L. 107-16, especially the ones with the greatest impact on revenues, phase in over time. Moreover, two of the provisions expire before calendar year 2006, and the rest expire

at the end of calendar year 2010.⁴ As a result, the reduction in projected revenues drops off substantially in fiscal year 2011, although the law continues to have an effect because the expiration occurs part way into the fiscal year. The reduction in revenues (and the associated increase in outlays for refundable tax credits) attributable to P.L. 107-16 averages 0.7 percent of GDP from 2001 to 2005, 1.1 percent of GDP from 2006 to 2010, and 0.8 percent of GDP in 2011.

Nearly 90 percent of the law's tax cuts apply to individual income taxes. Most are reductions in income tax rates, although P.L. 107-16 also lowers individual income taxes by increasing the child credit, providing relief from the so-called marriage penalty, boosting incentives for people to accumulate assets in pensions and individual retirement accounts (IRAs), creating or enhancing tax incentives for education, and providing temporary relief from the alternative minimum tax. P.L. 107-16 also reduces receipts from the taxation of estates and gifts.

Over the first six years (2001-2006), the 10 percent tax bracket created by the law accounts for the largest reduction in revenues, averaging almost \$40 billion a year. Over the following five years (2007-2011), the cuts in existing marginal tax rates have the biggest impact on revenues, accounting for about one-third of the reductions.

A brief description of the provisions of P.L. 107-16 follows. (Unless otherwise noted, each provision expires on December 31, 2010.)

Tax Rates on Individual Income. The legislation replaces the existing five statutory tax rates (which range from 15 percent to 39.6 percent) with six rates (ranging from 10 percent to 35 percent in 2006, after the changes are fully phased in). In addition, the legislation repeals the current restrictions on itemized deductions and personal exemptions for higher-

4. The expirations were included to ensure that P.L. 107-16 would be consistent with certain rules governing the reconciliation process in the Congress. See U.S. House of Representatives, *Economic Growth and Tax Relief Reconciliation Act of 2001, Conference Report to Accompany H.R. 1836, Report 107-84* (May 26, 2001), pp. 325-326.

Table 1-3.**Changes in CBO's Baseline Projections of the Surplus Since May 2001 (By fiscal year, in billions of dollars)**

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	Total, 2002-2006	Total, 2002-2011
Total Surplus as Projected in May 2001	275	304	353	400	437	508	578	641	718	806	883	2,002	5,629
Changes to Revenue Projections													
Legislative	-70	-31	-84	-101	-100	-126	-142	-151	-158	-176	-117	-442	-1,186
Economic	-23	-44	-43	-31	-21	-12	-3	5	13	17	19	-151	-99
Technical	-10	-17	-15	-14	-10	-8	-8	-9	-9	-9	-8	-64	-107
Total Revenue Changes	-104	-92	-142	-146	-132	-145	-153	-154	-155	-168	-106	-657	-1,392
Changes to Outlay Projections													
Legislative													
Discretionary	1	10	8	7	8	8	8	8	9	9	41	83	
Mandatory													
EITC/child tax credit	0	6	7	7	7	10	10	9	10	11	12	37	88
Refunds in excess of liabilities	4	*	0	0	0	0	0	0	0	0	0	*	*
Farm payments	6	0	0	0	0	0	0	0	0	0	0	0	0
Debt service	*	4	9	16	23	31	41	53	65	79	92	84	413
Other	*	*	*	*	*	*	*	*	*	*	*	*	*
Subtotal, mandatory	10	11	16	23	30	41	51	62	75	90	104	120	502
Subtotal, legislative	11	21	23	30	38	49	59	70	83	98	113	161	585
Economic													
Discretionary	*	1	2	2	3	3	3	3	3	3	3	10	25
Mandatory													
Unemployment insurance	2	6	7	8	3	2	1	1	*	*	*	26	29
Social Security	0	2	2	1	1	1	1	1	1	1	1	1	12
Net interest (Rate effects)	*	-7	-5	-1	*	1	*	*	*	*	*	*	-12
Debt service	*	2	5	8	10	12	14	15	15	16	16	16	113
Other	*	1	1	1	1	1	1	2	2	2	3	5	15
Subtotal, mandatory	2	4	9	16	16	17	18	19	19	20	21	62	159
Subtotal, economic	2	5	11	19	18	20	21	22	22	23	24	73	184

(Continued)

income taxpayers. That repeal is phased in beginning in 2006.

Of the direct reduction in surpluses that CBO estimates will result from the tax law, almost two-thirds (\$875 billion) comes from those changes in tax rates on individuals (see Table 1-4). About half of that reduction results from the new 10 percent bracket, with a similar amount from cuts in existing rates. Changes in deductions and exemptions produce a much smaller effect.

The 10 percent rate would apply to part of the income now taxed at 15 percent. That new rate is retroactive to January 2001 and applies to the first \$6,000 of taxable income for single taxpayers, \$10,000 for unmarried taxpayers filing as a head of household, and \$12,000 for joint filers. Those amounts are set to increase in 2008 and will be indexed for inflation thereafter.

To provide the benefits of the new 10 percent tax rate quickly, the legislation gives taxpayers a

Table 1-3.
Continued

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	Total, 2002-2006	Total, 2002-2011
Technical												1	2
Discretionary	3	*	*	*	*	*	*	*	*	*	*		
Mandatory													
Medicaid	2	2	1	1	1	1	1	1	1	1	1	6	12
Spectrum auctions	*	6	*	*	0	0	0	0	0	0	0	7	7
Net interest	1	-2	-1	*	*	-1	-1	-1	-1	-1	-1	-4	-7
Debt service	*	2	3	4	5	5	6	7	8	9	10	18	58
Other	*	2	2	-1	-1	-1	-1	-1	*	*	1	1	-1
Subtotal, mandatory	2	11	5	3	4	5	6	7	8	9	11	28	69
Subtotal, technical	6	10	5	4	5	5	6	7	8	9	12	29	70
Total Outlay Changes	18	36	40	53	61	74	85	99	113	131	148	263	839
Total Impact on the Surplus	-122	-128	-182	-198	-192	-219	-238	-253	-268	-299	-254	-920	-2,232
Total Surplus as Projected in August 2001	153	176	172	201	244	289	340	389	450	507	628	1,082	3,397
Memorandum:													
Total Legislative Changes	-81	-52	-107	-131	-138	-174	-201	-221	-241	-274	-230	-603	-1,771
Total Economic Changes	-25	-48	-54	-50	-40	-31	-23	-16	-9	-6	-5	-224	-283
Total Technical Changes	-16	-27	-20	-18	-15	-13	-13	-16	-17	-18	-19	-93	-177

SOURCE: Congressional Budget Office.

NOTE: * = between -\$500 million and \$500 million; EITC = earned income tax credit.

credit of 5 percent of their income that falls within the new bracket, administered through an advance payment mechanism. Taxpayers who filed returns for tax year 2000 will receive an advance refund this year (based on the amount they owed, their tax liability, in 2000) up to a maximum of \$300 for single filers, \$500 for heads of households, and \$600 for joint filers. The Department of the Treasury is currently implementing the advance refund by sending checks to taxpayers. It expects to complete the process by the end of September for taxpayers who filed returns by the April deadline. (It plans to send additional checks through the end of December to taxpayers who filed for extensions.) CBO projects that those advance refunds will total about \$40 billion, nearly all of which will be paid in fiscal year 2001. Those refunds and the provision for the new 10 percent tax

bracket reduce the cumulative surplus by an estimated \$421 billion through 2011.

If a taxpayer's advance refund exceeds the amount of his or her tax liability for 2001, the taxpayer will not be required to repay the difference. CBO believes that the difference should be classified as a government outlay—similar to the refundable portion of the earned income tax credit. Nearly \$4 billion of the \$40 billion in advance refunds, CBO estimates, represents refunds to taxpayers in excess of liabilities they will incur in 2001.

P.L. 107-16 also cuts, in three steps, the four highest tax rates on individual income. The first reduction took effect on July 1, 2001, and cut each rate (39.6 percent, 36 percent, 31 percent, and 28 percent)

Table 1-4.
**The Budgetary Effects of the Economic Growth and Tax Relief Reconciliation Act of 2001
(By fiscal year, in billions of dollars)**

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	Total, 2001-2006	Total, 2001-2011
Reductions in Income Tax Rates													
New 10 percent bracket	-38	-33	-40	-40	-40	-40	-40	-43	-45	-46	-14	-233	-421
Cuts in existing rates	-2	-21	-21	-29	-33	-51	-59	-60	-62	-63	-19	-157	-421
Changes in deduction and exemption limits	0	0	0	0	0	-2	-4	-5	-7	-9	-6	-2	-33
Subtotal	-40	-55	-61	-69	-73	-93	-103	-109	-114	-118	-39	-391	-875
Child Credit	-1	-9	-10	-11	-13	-18	-19	-19	-21	-25	-26	-61	-172
Estate and Gift Taxes	0	*	-7	-6	-8	-5	-10	-12	-13	-24	-54	-25	-138
Taxes on Married Couples	0	*	-1	-1	-6	-10	-11	-10	-10	-9	-4	-18	-63
Pension and IRA Provisions	0	-2	-4	-5	-5	-6	-5	-5	-6	-7	-5	-22	-50
Education Incentives	0	-2	-3	-4	-5	-3	-2	-3	-3	-3	-1	-18	-29
AMT Exemption	*	-2	-3	-5	-4	0	0	0	0	0	0	-14	-14
Payment Dates for Corporate Income Taxes	-33	33	0	-7	7	0	0	0	0	0	0	0	0
Other Tax Reductions	0	*	-1	-1	-1	-1	-1	-1	-1	-1	-1	-3	-8
Total Impact on the Surplus	-74	-38	-91	-108	-107	-135	-152	-160	-168	-187	-130	-552	-1,349
Memorandum:													
Total Impact on the Surplus as a Percentage of GDP	-0.7	-0.4	-0.8	-0.9	-0.9	-1.0	-1.1	-1.1	-1.1	-1.2	-0.8	-0.8	-0.9
Outlays for Refundable Tax Credits	4	6	7	7	7	10	10	9	10	11	12	40	92
Total Change in Revenues	-70	-31	-84	-101	-100	-126	-142	-151	-158	-176	-117	-512	-1,256

SOURCES: Congressional Budget Office; Joint Committee on Taxation.

NOTES: * = between -\$500 million and zero; IRA = individual retirement account; AMT = alternative minimum tax.

Separate estimates of the effects on revenues and outlays are not available for several provisions, including the reductions in income tax rates and the changes in the child credit.

by 1 percentage point. The second reduction, a further 1 percentage point, will take place in 2004. The final reduction, which will cut the top rate by 2.6 percentage points and the rest by 1 percentage point, is scheduled to take place in 2006. Between 2006 and

the provisions' expiration at the end of calendar year 2010, those tax rates will be 35 percent, 33 percent, 28 percent, and 25 percent. Those rate reductions reduce surpluses by another \$421 billion through fiscal year 2011.

In addition, the new law phases out the restrictions on itemized deductions and personal exemptions starting in 2006. It cuts those restrictions by one-third for 2006 and 2007, by another third for 2008 and 2009, and repeals them entirely in 2010. That provision will reduce surpluses by \$33 billion through 2011.

Child Credit. The legislation doubles the current child tax credit to \$1,000 by 2010. This year, the credit rises to \$600 for each child under age 17, with subsequent increases of \$100 in 2005 and 2009 before a final jump in 2010, after which the changes expire. The credit is also made refundable for certain people who owe no taxes. They can receive payments of up to 10 percent (15 percent starting in 2005) of their earned income over \$10,000, indexed for inflation.

The legislation also provides that the child credit (though not other personal credits) may reduce the amount of the alternative minimum tax. Furthermore, that tax does not reduce the refundable portion of the child credit and the earned income tax credit.

Part of the budgetary effect of raising the child credit takes the form of an increase in refundable outlays. That change, combined with cuts in individual income taxes, increases refundable outlays by an estimated \$92 billion over the 2001-2011 period. In all, the provisions relating to the child credit reduce surpluses by a cumulative \$172 billion through 2011.

Estate and Gift Taxes. P.L. 107-16 makes numerous changes to the taxation of money transferred during life or at death, reducing revenues by a total of \$138 billion through 2011. The amount of an estate that is effectively exempt from taxation increases in steps from \$1 million to \$3.5 million by 2009. Similarly, the highest tax rate on estates declines in steps from 55 percent to 45 percent by 2007. The new law repeals the estate tax altogether in 2010, although that tax is reinstated in 2011.

When the estate tax is repealed, much of the property transferred at death will receive the decedent's tax basis in the property, as opposed to the

stepped-up basis allowed under previous law.⁵ In addition, the credit that is currently allowed for state-level estate taxes will be phased out over the 2002-2005 period and replaced with a deduction.

The top rate of the gift tax declines along with the top rate of the estate tax, but the gift tax is not repealed in 2010. In that year, it is scheduled to equal the top income tax rate, 35 percent. The amount of gift transfers exempt from taxation is set at \$1 million starting in 2002.

Taxes on Married Couples. The legislation contains several provisions to reduce taxes on married filers, some of whom pay a "marriage penalty" (in other words, they pay more tax filing jointly than they would pay combined if they were not married and filed as single taxpayers). Those changes phase in starting in 2005 and become fully effective in 2009. The law increases the standard deduction for taxpayers who file jointly until it is twice that of single taxpayers, sets the maximum income level for the 15 percent tax bracket for married couples at twice that for single taxpayers, and increases the income levels at which the earned income tax credit phases out for married taxpayers. Although those provisions will decrease marriage penalties for some households, they will also benefit married couples who already pay less together than they would if they filed singly. Altogether, the provisions ascribed to marriage-penalty relief will reduce revenues by an estimated \$63 billion through 2011.

Pensions and Individual Retirement Accounts. P.L. 107-16 makes numerous changes to laws that affect retirement savings, reducing the surplus by an estimated \$50 billion through 2011. Three provisions account for about 80 percent of the budgetary effect:

- The annual contribution limits for both traditional and Roth IRAs rise gradually from \$2,000 to \$5,000 by 2008 and are indexed for inflation thereafter. Taxpayers age 50 or older are allowed to make additional contributions.

5. Tax basis generally refers to the cost of acquiring property, which is used in calculating any capital gains or losses when the property is disposed of.

- A new nonrefundable tax credit applies to the first \$2,000 of contributions to IRAs and 401(k)-type plans. The credit equals as much as half of the contribution (depending on the taxpayer's income) up to \$1,000. It is not available to single taxpayers with adjusted gross income over \$25,000 or to joint filers with income over \$50,000. The credit expires after 2006.
- The maximum amount that employees can choose to contribute to their 401(k) or other defined-contribution plans increases to \$11,000 in 2002 and then rises annually in \$1,000 increments until 2006, when it reaches \$15,000. That maximum amount is indexed for inflation thereafter. In addition, Roth 401(k)s—in which workers' after-tax payroll contributions go to their Roth IRAs—become available in 2006.

Education Incentives. The legislation creates new tax benefits for education and extends or expands existing ones. Those changes will reduce revenues by \$29 billion through 2011.

- Taxpayers receive a new tax deduction for up to \$3,000 (\$4,000 starting in 2004) of qualified higher education expenses. Taxpayers do not have to itemize to use the deduction. Single taxpayers with income above \$65,000 and joint filers with income above \$130,000 are ineligible in 2002 and 2003, although a deduction of up to \$2,000 becomes available in 2004 and 2005 for taxpayers with income at somewhat higher levels. The deduction expires after 2005.
- Taxpayers can contribute up to \$2,000 a year to education IRAs, four times the previous limit. Also, those accounts can now be used to pay expenses for elementary or secondary school.
- Students can exclude earnings from qualified tuition plans—so-called section 529 plans—from their taxable income rather than including those earnings in income, as under prior law.
- The long-standing provision that allows taxpayers to exclude certain employer-provided education assistance from their income has been extended to 2010 and expanded to include assistance for graduate education.

- The five-year time limit for taxpayers to deduct up to \$2,500 of annual interest on student loans has been removed, and the income limits for eligibility have risen.

Relief from the Alternative Minimum Tax. Starting this year, the amount of income exempt from the alternative minimum tax is \$35,750 for single taxpayers and \$49,000 for joint filers rather than the \$33,750 for single taxpayers and \$45,000 for joint filers that has existed since 1993. The exemptions revert to previous levels after 2004. Those provisions reduce revenues by \$14 billion through 2005 but do not affect them in later years.

Shift in Corporate Tax Payments. P.L. 107-16 allows corporations to make their estimated payments of income taxes on October 1, 2001, instead of September 15, 2001. The same delay will apply in September 2004 but only for part of the estimated payment. Those provisions shift an estimated \$33 billion in corporate tax receipts from fiscal year 2001 into 2002 and \$7 billion from fiscal year 2004 into 2005, with no long-term effect on revenues.

Other Tax Reductions. Other changes in the legislation include increasing the tax credits for adoption and dependent care and establishing a new tax credit for businesses to cover part of their costs of offering child care to employees. Those provisions reduce revenues by \$8 billion through 2011.

Extending Expiring Provisions. A number of provisions of tax law are scheduled to expire during CBO's projection period. (P.L. 107-16 added to that number by mandating that all of its tax changes still in effect in 2010 will expire at the end of that year.) CBO's revenue projections assume that current tax law is unchanged and that the scheduled changes and expirations occur on time. The sole exception is the expiration of excise taxes dedicated to trust funds; the Balanced Budget and Emergency Deficit Control Act of 1985 requires CBO to assume in its baseline projections that those taxes are extended permanently. CBO's baseline projections of the surplus would change if other expiring provisions were also extended permanently (see Box 1-1).

Box 1-1.
The Expiration of Revenue Provisions

The scheduled expiration of various tax provisions has a significant impact on the outlook for the budget over the next decade. Two provisions of the Economic Growth and Tax Relief Reconciliation Act of 2001 (Public Law 107-16) expire by the end of calendar year 2005, and the rest of the provisions, representing the bulk of the law's budgetary cost, expire on December 31, 2010. As a result, the impact of the legislation diminishes substantially between fiscal years 2010 and 2011—from \$187 billion to \$130 billion.

Many other provisions of the tax code, enacted before this year, are also scheduled to expire during the next 10 years. They include the treatment of nonrefundable personal credits under the alternative minimum tax (AMT), which expires at the end of 2001, and the research and experimentation credit, which expires in 2004.

By law, the Congressional Budget Office's (CBO's) budget projections must assume that almost all such provisions expire as planned. (The only exception is expiring excise taxes dedicated to trust funds, which by statute are assumed to be extended.) An alternative measure of the long-term budgetary effects of current tax policy could assume that the expirations do not occur as scheduled but rather that the Congress and the President immediately extend the provisions indefinitely. Under those assumptions, the Joint Committee on Taxation estimates that federal revenues would be \$397 billion lower than projected levels dur-

ing the 2002-2011 period (see the table below).¹ Well over half of that amount, \$255 billion, would result from extending P.L. 107-16. The other \$142 billion would come from extending previously existing tax provisions, such as the research and experimentation tax credit.

During CBO's 10-year projection period, the largest effect of extending P.L. 107-16 would occur in 2011 (the year after most of the law would have expired). But some effects would appear earlier. Extending the changes to estate and gift taxes could be expected to reduce revenues as early as 2003, because if taxpayers knew that the law's repeal of the estate tax would become permanent in 2011, some of them might postpone taxable gifts that they would otherwise have made during the decade. The estimates shown below also assume that the higher exemption levels for the AMT, which expire in 2004, are extended at their 2004 levels. Under that assumption, the exemption levels would not rise with inflation, so a growing number of taxpayers would still become subject to the AMT over time—albeit fewer than if the higher exemption levels expire as now scheduled. In all, the revenue losses from extending expiring provisions would total \$241 billion in the years before 2011.

1. For more detail, see Joint Committee on Taxation, *Estimated Revenue Effects of a One-Year Extension of Federal Tax Provisions Scheduled to Expire in 2001 and Permanent Extension of Federal Tax Provisions Scheduled to Expire in 2001-10*, JCX-66-01 (August 3, 2001).

Effects on Revenues of Extending Expiring Tax Provisions
(By fiscal year, in billions of dollars)

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	Total, 2002- 2011
Provisions in the Economic Growth and Tax Relief Reconciliation Act of 2001											
Provisions expiring in 2010	n.a.	-1	-1	-1	-1	-2	-1	-2	-3	-100	-113
Alternative minimum tax exemption ^a	n.a.	n.a.	n.a.	-4	-11	-16	-20	-24	-27	-23	-124
Higher education deduction ^b	n.a.	n.a.	n.a.	n.a.	-2	-3	-3	-3	-3	-3	-18
Subtotal	n.a.	-1	-1	-5	-15	-20	-24	-29	-33	-127	-255
Other Expiring Provisions ^c	-1	-2	-4	-9	-13	-17	-20	-22	-25	-29	-142
Total Effect on Revenues	-1	-3	-5	-14	-28	-37	-45	-51	-58	-155	-397

SOURCE: Congressional Budget Office.

NOTES: These estimates assume that the expiring provisions are extended immediately rather than when they are about to expire.

n.a. = not applicable.

a. Expires in 2004. The calculation assumes that the exemptions are extended at their 2004 levels.

b. Expires in 2005.

c. Includes numerous provisions, such as the tax credit for research and experimentation, that expire during the 2002-2010 period.

The Effects of Economic and Technical Changes on Revenue Projections

Roughly \$23 billion of CBO's downward revision to its revenue projection for 2001 can be attributed to changes in the economy—primarily to the recent decline in corporate profits. That decline reduces receipts from the corporate income tax and, to a lesser extent, from the individual income tax. (Some firms, known as S corporations, are taxed like partnerships, meaning that their profits are immediately taxable as individual rather than corporate income.)

Changes to CBO's economic forecast (described in Chapter 2) reduce projected revenues over the 2002-2007 period by about \$150 billion (see Table 1-3). After that, by contrast, the revised economic forecast results in a modest revenue increase. CBO considers the recent weakness in profits to be a short-term phenomenon of the business cycle rather than a permanent change. Profits are expected to remain low in 2002 but rebound quickly after that; by later in the decade they are projected to be back near the levels projected last January. As a result, the downward adjustment to revenues gradually wanes over the 10-year projection period. CBO has increased projected receipts for the final few years of that period because it expects a rise in nonwage personal income (such as interest and dividends).

Technical revisions to CBO's revenue projections mostly reflect weakness in current revenue collections that is not explained by current measures of economic activity. The downward technical reestimate of \$10 billion for 2001 applies mainly to receipts from individual income taxes. So far this year, those receipts have been smaller than recent measures of wages and salaries and other personal income in the national income accounts would suggest. The reestimate follows a similar reduction of \$5 billion that CBO made in May to its projection of individual income tax receipts for 2001. In May, CBO also reduced its baseline projection of corporate tax receipts for 2001 by \$15 billion because those receipts were weaker than had been expected earlier in the year. However, no further adjustment to corporate taxes for 2001 appears necessary.

Technical reestimates reduce revenue projections by a larger amount—\$17 billion—for 2002.

About \$10 billion of that amount reflects an assumption that the latest technical change to estimated revenues in 2001 will also apply in 2002. Most of the remaining \$7 billion is an extension of the adjustment made in May to projected individual income tax receipts for 2001. In CBO's May baseline, that adjustment did not apply beyond 2001, but CBO has now extended it to the following year.

In all, technical changes lower CBO's revenue projections by \$107 billion over the 2002-2011 period, with the reestimate in most years smaller than that of the previous year. That gradual decline largely reflects the phasing out of revisions for the recent weakness in corporate tax receipts that is not explained by current measures of lower corporate profits. CBO assumes that when corporate profits rebound, the unexplained weakness in receipts will also reverse course.

The Effects of Recent Legislation on Outlay Projections

Projected spending during the 2002-2011 period under current policies has grown by \$839 billion from CBO's previous projections (see Table 1-3). About two-thirds of that increase (\$585 billion) is attributable to recent legislation—the tax law and supplemental appropriations—and to the added debt-service costs that result. Changes in the economic outlook account for most of the rest of the increase in projected outlays.

Discretionary Spending. The 2001 Supplemental Appropriations Act, enacted on July 24, provides about \$6.5 billion in budget authority for various programs. Roughly \$5.9 billion of that amount is intended to bolster defense personnel and readiness programs. Although the law provides additional budget authority for fiscal year 2001, most of the outlays from that budget authority will not occur until 2002 because very little time remains in the current fiscal year. CBO projects that the supplemental appropriations for 2001 will increase outlays by \$1 billion in 2001 and about \$4.5 billion in 2002.

Under the statutes of the Deficit Control Act, CBO's baseline projections must assume that annual appropriations for discretionary programs will con-

tinue at the current level with increases for the projected rates of inflation each year. As a result, enactment of the 2001 Supplemental Appropriations Act causes discretionary outlays in CBO's baseline to increase by a total of \$83 billion from 2002 through 2011.

Mandatory Spending. The recent tax law made reductions in tax rates and changes to the child tax credit that will increase spending for refundable tax credits. The effect of those provisions on outlays begins in 2002 and reaches \$12 billion by 2011, for a total of \$88 billion during the 2002-2011 period.

In addition, the tax law increases outlays this year by \$3.6 billion—an amount that represents the portion of the law's advance refunds that are projected to exceed people's 2001 tax liabilities. CBO is treating that excess as an outlay because it does not represent a refund of 2001 taxes and because the law does not stipulate that any excess advance refunds should be considered refunds of taxes from prior years.

The Congress and the President have also enacted legislation to direct the Commodity Credit Corporation to pay \$5.5 billion to agricultural producers in 2001. Most of those funds will go directly to producers who were eligible to receive assistance provided by previous legislation in 2000 and 2001. The law specifies that the money is to be disbursed by September 30, 2001. Because that spending is considered mandatory, CBO's baseline does not assume any corresponding increases in outlays in later years.

Interest payments on federal debt, another type of mandatory spending, will also increase because of recent legislation. CBO estimates that the total effect of all legislation enacted since May—accounting for decreases in revenues and for increases in discretionary and mandatory outlays—is to reduce projected surpluses by \$81 billion in 2001 and \$1.36 trillion over the 2002-2011 period. That change in projected surpluses translates to an increase in debt-service costs, because less money will be available to reduce outstanding debt. Federal debt will therefore remain higher than it would have been without new legislation. CBO estimates that the added debt-service costs attributable to recent legislation will total \$413 billion over the 2002-2011 period, bringing the total

impact of that legislation to nearly \$1.8 trillion over 10 years.

The Effects of Economic and Technical Changes on Outlay Projections

Changes in projected spending that are driven directly by changes in CBO's economic forecast since May amount to \$5 billion in 2002 and total \$184 billion from 2002 through 2011. Technical adjustments to spending projections incorporate new information about the operation of federal programs, particularly actual outlays through July 2001. Such adjustments increase projected outlays by \$10 billion for 2002 and a total of \$70 billion for the 2002-2011 period.

Discretionary Spending. CBO projects discretionary spending by adjusting it each year of the 10-year projection period for expected rates of inflation. CBO's estimates of the two relevant measures of inflation (the GDP deflator and the employment cost index for wages and salaries) for the next two years are 0.1 to 0.2 percentage points higher now than they were in January, when CBO last updated its economic assumptions. Those changes in projected inflation raise discretionary spending in the current baseline by \$1 billion to \$3 billion a year, for a total of \$25 billion through 2011 (see Table 1-3).

Most of the technical adjustments to discretionary spending apply only to the current fiscal year. Those adjustments, which increase projected outlays in 2001 by \$3 billion, mainly reflect new information about spending to date. Although the revisions affect nearly all budget functions, by far the largest involve outlays for the Department of Defense's personnel, operation and maintenance, and procurement accounts. That spending is projected to be about \$2.5 billion higher than CBO previously estimated.

Mandatory Spending. Although projections of mandatory spending flow from the provisions of permanent law enacted up to the time of the projection, many mandatory programs are affected by changes in the economic forecast and are subject to technical changes as well.

Economic Changes. Changes in CBO's economic forecast since January increase projected mandatory spending by a total of \$159 billion for the 2002-2011 period. Unemployment insurance and Social Security are the two mandatory programs most affected by the revised economic forecast.

Benefit payments from the unemployment insurance program are linked to the unemployment rate. CBO is now expecting substantially higher unemployment in the next few years than it did in January—a rate of 5.1 percent in 2002, for example, rather than the 4.5 percent it forecast earlier. As a direct result of that rise, CBO has increased its estimate of unemployment insurance payments in 2001 by \$2 billion, with the increases peaking in 2004 and totaling \$29 billion over the 2002-2011 period.

Higher-than-expected inflation in 2001 will also push up the amount of the annual cost-of-living adjustment for Social Security recipients by an estimated \$1.7 billion in 2002 (relative to CBO's May baseline). The effects of that increase persist through the decade, although they diminish to \$600 million by 2011. Other income security programs—Railroad, Civil Service, and Military Retirement; Supplemental Security Income; and veterans compensation and pensions—receive automatic cost-of-living adjustments and are similarly affected by CBO's revised forecast for inflation. Moreover, higher projected inflation boosts the costs of health care services—and thus spending for Medicare—toward the end of the decade.

Changes in projected interest rates have a mixed effect on mandatory spending. Because of actions taken by the Federal Reserve in response to a weakening economy, CBO now estimates that the interest rate on three-month Treasury bills will average 3.6 percent in fiscal year 2002, more than a full percentage point lower than in its previous forecast. However, it is now expecting the rate on 10-year Treasury notes to average 5.5 percent next year, nearly 0.4 percentage points higher than previously anticipated. On net, those changes and other near-term adjustments in interest rates lower the government's projected interest payments on the federal debt by about \$7 billion in 2002 and \$5 billion in 2003.

Other changes besides those to interest rates affect the government's debt-service costs. Revisions to the economic forecast add to projected spending and decrease anticipated revenues, reducing baseline surpluses by \$25 billion in 2001 and by another \$170 billion over the following 10 years. Because most of that change occurs in the next few years, projected debt-service costs for the 2002-2011 period increase by \$113 billion for economic reasons.

Technical Changes. Technical reestimates have raised CBO's projections of mandatory spending by \$69 billion for the entire projection period, with Medicaid being the program most affected. Medicaid spending has been growing more rapidly this year than CBO had expected; in the first 10 months of the fiscal year it has been about 13 percent higher than it was last year (CBO had previously estimated that Medicaid spending would grow by about 10 percent this year). The rapid increase reflects higher enrollment in the program, increased spending on prescription drugs, and increased use by states of certain financing mechanisms that generate additional federal payments. As a result, CBO has boosted its projections of Medicaid spending by about \$1.6 billion for 2001, \$1.9 billion for 2002, and slightly smaller amounts for each year through 2011. Much of the increase for later years reflects a major expansion of New York's Medicaid program that was recently approved by the Administration.

Estimates of proceeds from the Federal Communications Commission's (FCC's) auctions of licenses to use parts of the electromagnetic spectrum continue to be volatile. CBO has adjusted its previous estimates of such proceeds for two reasons. First, recent court rulings have cast doubt on the FCC's authority to cancel and resell licenses held by companies that are in bankruptcy proceedings. As a result, the FCC's recoveries on loans to such companies may be lower than the amounts already recorded in the budget. Second, an auction originally scheduled for September 2001—which was expected to bring in about \$3.5 billion in receipts in 2002—has been postponed. CBO now expects proceeds from that auction to appear in 2003 and 2004.

The largest technical changes in mandatory spending are for increased debt-service costs, mostly

because of the technical changes that reduce projected revenues. Technical revisions raise cumulative debt-service costs by \$58 billion between 2002 and 2011.

The Budget Outlook for 2002 Through 2011

CBO expects total federal revenues to shrink from 20.6 percent of GDP last year to 19.6 percent of GDP this year (see Table 1-2 on page 2). About 0.7 percentage points of that drop is attributable to the enactment of the new tax law. Revenues are projected to rise to 19.9 percent of GDP in 2002 and level off at roughly 19.3 to 19.5 percent of GDP through 2010. They are projected to rise again the following year because of the scheduled expiration of various tax provisions in 2011.

On the spending side of the ledger, total outlays as a share of GDP are expected to decline gradually through the decade—from 18.1 percent of GDP in 2001 to 16.0 percent in 2011. In CBO’s baseline, mandatory spending grows faster than GDP, but discretionary spending grows more slowly (because the rate at which CBO inflates discretionary spending does not keep pace with growth in nominal GDP). Net interest payments by the federal government are expected to decrease as continuing surpluses allow large amounts of outstanding debt to be paid off.

Under baseline assumptions, the steady decline in outlays as a percentage of GDP, combined with revenues that dip only slightly as a share of GDP for most of the 10-year period, results in growing surpluses (both in dollar terms and as a share of GDP). By 2010, the projected on-budget surplus equals more than 1 percent of GDP and the total surplus exceeds 3 percent of GDP.

Discretionary spending, which makes up about one-third of total spending, is provided and controlled by yearly appropriation acts. CBO constructs its baseline for such spending by taking the amounts of budget authority appropriated for 2001 and adjust-

ing them for inflation in future years using projections of the employment cost index (for spending related to federal personnel) and the GDP deflator (for other spending). In CBO’s baseline, discretionary outlays grow from \$647 billion in 2001 to \$878 billion in 2011 (see Table 1-5).

That method for projecting future discretionary spending follows the specific instructions in the Deficit Control Act. However, other paths for discretionary spending are possible. If budget authority were to grow at the same rate as nominal GDP after 2001 (an average rate of 5.1 percent a year), discretionary outlays would be \$930 billion higher over the 10-year period than in CBO’s baseline. Alternatively, if budget authority were frozen at the level provided for 2001, discretionary outlays would be about \$1 trillion lower during those 10 years.

Spending for entitlements and other mandatory programs—by far the largest spending category in the budget—is projected to total nearly \$1.1 trillion in 2001 and to continue growing rapidly through 2011 (see Table 1-6). Spending for Social Security, Medicare, and Medicaid, which together account for slightly more than three-quarters of all mandatory outlays, is fueling that growth.

Interest costs on federal debt are currently a sizable portion of the federal budget. But under CBO’s baseline projections of rising annual surpluses through 2011, debt held by the public declines over that period. Accordingly, annual interest payments on that debt are expected to fall from their estimated 2001 level of \$207 billion to \$50 billion in 2011 (see Table 1-7).

The future path of interest costs depends on the size and composition of federal debt. Much of the current debt held by the public will be paid down as surpluses accrue over the next several years. However, part of that debt—including some long-term bonds and savings bonds—will not be available for redemption during the 10-year projection period. Therefore, in any given year, a certain amount of debt (about \$876 billion by 2011, CBO estimates) will remain outstanding and incur interest costs, regardless of the size of the surplus (see Table 1-8).

Table 1-5.
CBO's Projections of Discretionary Spending Under Alternative Assumptions
(By fiscal year, in billions of dollars)

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	Total, 2002- 2011
Baseline (Discretionary Spending Grows at Projected Rates of Inflation After 2001)												
Budget Authority												
Defense	317	328	337	346	355	364	373	383	393	403	414	3,697
Nondefense	<u>325</u>	<u>342</u>	<u>351</u>	<u>360</u>	<u>369</u>	<u>378</u>	<u>388</u>	<u>397</u>	<u>407</u>	<u>418</u>	<u>428</u>	<u>3,839</u>
Total	642	670	689	707	725	742	761	780	800	821	842	7,536
Outlays												
Defense	305	323	330	339	351	358	364	377	387	397	411	3,637
Nondefense	<u>342</u>	<u>366</u>	<u>387</u>	<u>398</u>	<u>408</u>	<u>416</u>	<u>425</u>	<u>435</u>	<u>446</u>	<u>456</u>	<u>467</u>	<u>4,205</u>
Total	647	689	717	737	759	774	789	812	833	853	878	7,842
Discretionary Spending Grows at the Rate of Nominal GDP After 2001												
Budget Authority												
Defense	317	332	350	368	388	408	429	451	474	498	524	4,222
Nondefense	<u>325</u>	<u>346</u>	<u>364</u>	<u>383</u>	<u>402</u>	<u>423</u>	<u>444</u>	<u>466</u>	<u>489</u>	<u>514</u>	<u>540</u>	<u>4,371</u>
Total	642	678	715	751	790	830	873	917	964	1,012	1,064	8,593
Outlays												
Defense	305	326	339	357	378	395	413	438	461	484	513	4,105
Nondefense	<u>342</u>	<u>368</u>	<u>395</u>	<u>415</u>	<u>434</u>	<u>453</u>	<u>474</u>	<u>496</u>	<u>519</u>	<u>543</u>	<u>569</u>	<u>4,667</u>
Total	647	694	735	772	813	849	887	934	980	1,028	1,082	8,772
Discretionary Spending Is Frozen at the Level Enacted for 2001												
Budget Authority												
Defense	317	317	317	317	317	317	317	317	317	317	317	3,174
Nondefense	<u>325</u>	<u>328</u>	<u>328</u>	<u>328</u>	<u>328</u>	<u>328</u>	<u>328</u>	<u>327</u>	<u>327</u>	<u>327</u>	<u>327</u>	<u>3,275</u>
Total	642	645	645	645	645	645	645	645	645	645	645	6,449
Outlays												
Defense	305	315	314	314	317	315	313	316	316	316	319	3,156
Nondefense	<u>342</u>	<u>359</u>	<u>372</u>	<u>375</u>	<u>371</u>	<u>369</u>	<u>368</u>	<u>367</u>	<u>367</u>	<u>366</u>	<u>366</u>	<u>3,681</u>
Total	647	675	686	689	688	684	681	683	683	683	685	6,837

SOURCE: Congressional Budget Office.

NOTES: In CBO's projections, discretionary outlays are always higher than discretionary budget authority because of spending from the Highway Trust Fund and the Airport and Airways Trust Fund, which is subject to obligation limitations in appropriation acts. The budget authority for such programs is provided in authorizing legislation and is not considered discretionary. Another reason that outlays exceed budget authority is that outlays include spending from appropriations provided in previous years.

Numbers in this table include spending from the 2001 Supplemental Appropriations Act (P.L. 107-20) and the continuation of such spending through 2011.

Table 1-6.
CBO's Baseline Projections of Mandatory Spending (By fiscal year, in billions of dollars)

	Actual 2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	Total, 2002- 2011
Means-Tested Programs													
Medicaid	118	131	143	152	165	178	193	209	227	246	268	292	2,073
State Children's Health Insurance	1	4	4	4	5	4	4	5	5	5	5	5	47
Food Stamps	18	19	20	22	23	23	24	25	25	26	27	27	241
Supplemental Security Income	31	27	31	33	34	39	38	36	42	44	46	52	394
Family Support ^a	21	25	26	25	25	25	25	25	25	25	25	26	253
Veterans' Pensions	3	3	3	3	3	3	3	3	3	4	4	5	35
Child Nutrition	9	10	10	10	11	11	12	12	13	13	14	14	120
Earned Income and Child Tax Credits	27	27	33	34	34	35	38	38	38	39	40	43	370
Student Loans	1	-2	4	4	4	4	4	4	4	4	4	4	41
Foster Care	5	6	6	7	7	8	8	9	10	10	11	11	88
Total	236	250	281	294	310	331	349	366	392	416	444	480	3,663
Non-Means-Tested Programs													
Social Security	406	429	453	475	499	524	551	579	610	644	681	720	5,736
Medicare	216	238	253	270	289	315	333	363	392	423	458	503	3,599
Subtotal	622	668	706	745	788	839	885	942	1,001	1,067	1,139	1,223	9,335
Other Retirement and Disability													
Federal civilian ^b	50	53	57	60	63	66	69	72	75	78	82	85	705
Military	33	34	35	36	37	38	39	40	41	42	43	44	398
Other	5	6	5	5	5	5	5	5	5	5	5	5	51
Subtotal	88	93	97	101	105	109	113	117	121	126	130	135	1,154
Unemployment Compensation	21	27	35	37	37	35	36	37	39	40	42	44	382
Other Programs													
Veterans' benefits ^c	24	21	25	27	28	31	30	28	31	32	33	36	300
Commodity Credit Corporation Fund	30	23	12	10	10	9	8	7	6	5	5	5	77
Social services	5	4	5	5	5	5	5	5	5	5	5	5	48
Credit reform													
liquidating accounts	-11	-7	-6	-6	-6	-6	-6	-6	-6	-5	-5	-5	-58
Universal Service Fund	4	5	6	6	12	13	13	13	13	13	13	13	115
Department of Defense health care	0	0	0	6	6	7	7	7	8	9	9	10	68
Other	14	8	22	19	19	15	15	15	15	15	15	15	164
Subtotal	66	54	63	66	72	73	71	69	72	74	76	79	715
Total	796	842	900	949	1,002	1,056	1,104	1,165	1,233	1,307	1,387	1,481	11,586
Total													
All Mandatory Spending	1,032	1,092	1,181	1,243	1,313	1,387	1,454	1,531	1,625	1,724	1,831	1,961	15,249

SOURCE: Congressional Budget Office.

NOTE: Spending for the benefit programs shown above generally excludes administrative costs, which are discretionary. Spending for Medicare also excludes premiums, which are considered offsetting receipts.

- a. Includes Temporary Assistance for Needy Families and various programs that involve payments to states for child support enforcement and family support, child care entitlement to states, and children's research and technical assistance.
- b. Includes Civil Service, Foreign Service, Coast Guard, and other small retirement programs and annuitants' health benefits.
- c. Includes veterans' compensation, readjustment benefits, life insurance, and housing programs.

Table 1-7.
CBO's Baseline Projections of Federal Interest Outlays (By fiscal year, in billions of dollars)

	Actual 2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	Total, 2002- 2011
Interest on the Public Debt (Gross interest) ^a	362	355	338	344	355	358	360	362	363	361	365	382	3,587
Interest Received by Trust Funds													
Social Security	-60	-69	-78	-87	-97	-109	-122	-136	-151	-167	-185	-204	-1,336
Other trust funds ^b	-69	-70	-72	-75	-79	-83	-88	-93	-98	-103	-108	-114	-912
Subtotal	-129	-139	-149	-161	-176	-192	-210	-228	-249	-270	-293	-318	-2,248
Other Interest ^c	-10	-9	-10	-9	-10	-11	-12	-12	-13	-13	-14	-14	-116
Total (Net interest)	223	207	179	174	168	155	139	121	101	78	58	50	1,223
Proceeds Earned on the Balance of Uncommitted Funds ^d	0	0	0	0	0	0	0	0	0	0	-7	-29	-36
Total	223	207	179	174	168	155	139	121	101	78	51	21	1,187

SOURCE: Congressional Budget Office.

- a. Excludes interest costs of debt issued by agencies other than the Treasury (primarily the Tennessee Valley Authority).
- b. Principally Civil Service Retirement, Military Retirement, Medicare, unemployment insurance, and the Airport and Airway Trust Fund.
- c. Primarily interest on loans to the public.
- d. "Uncommitted funds" is CBO's term for the surpluses that remain each year after paying down publicly held debt available for redemption. CBO assumes that those funds, which accumulate from one year to the next, earn proceeds at a rate equal to the average interest rate projected for Treasury bills and notes.

In 2010, the baseline begins to show uncommitted funds remaining after all available debt is paid off. If policies do not change, the balance of such funds is projected to reach \$820 billion by the end of 2011. CBO makes no explicit assumption about what the Treasury might do with the uncommitted funds; its projections simply assume that such funds will earn proceeds at a rate equal to the average interest rate projected for Treasury bills and notes.

those programs that are labeled as trust funds in legislation; federal funds include all other transactions with the public.

The federal government has more than 200 trust funds, although fewer than a dozen account for the vast share of trust fund dollars. Among the largest are the two Social Security trust funds (the Old-Age and Survivors Insurance Trust Fund and the Disability Insurance Trust Fund) and funds dedicated to Civil Service Retirement, Military Retirement, and Hospital Insurance (Part A of Medicare). Trust funds have no particular economic or budgetary significance; they function mainly as accounting mechanisms to track receipts and spending for programs that have specific taxes or other revenue sources earmarked for their use.

Federal Funds and Trust Funds

The federal budget comprises two groups of funds: trust funds and federal funds. The former are simply

Table 1-8.
CBO's Baseline Projections of Federal Debt at the End of the Year (By fiscal year, in billions of dollars)

	Actual											
	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Gross Federal Debt	5,629	5,752	5,856	5,982	6,094	6,194	6,276	6,326	6,348	6,333	6,541	6,949
Debt Held by Government Accounts												
Social Security	1,007	1,170	1,346	1,536	1,740	1,964	2,206	2,468	2,750	3,053	3,376	3,722
Other government accounts ^a	<u>1,212</u>	<u>1,288</u>	<u>1,372</u>	<u>1,463</u>	<u>1,557</u>	<u>1,658</u>	<u>1,770</u>	<u>1,883</u>	<u>1,997</u>	<u>2,115</u>	<u>2,235</u>	<u>2,352</u>
Total	2,219	2,458	2,719	2,999	3,297	3,622	3,976	4,350	4,747	5,168	5,611	6,073
Debt Held by the Public	3,410	3,294	3,138	2,983	2,797	2,572	2,300	1,976	1,601	1,165	930	876
Balance of Uncommitted Funds ^b	0	0	0	0	0	0	0	0	0	0	259	820
Net Indebtedness	3,410	3,294	3,138	2,983	2,797	2,572	2,300	1,976	1,601	1,165	671	56
Memorandum:												
Debt Subject to Limit ^c	5,592	5,715	5,820	5,951	6,069	6,174	6,257	6,307	6,330	6,315	6,524	6,932
Debt Held by the Public as a Percentage of GDP	34.7	32.1	29.2	26.3	23.5	20.5	17.4	14.2	11.0	7.6	5.8	5.2

SOURCE: Congressional Budget Office.

- a. Mainly Civil Service Retirement, Military Retirement, Medicare, unemployment insurance, and the Airport and Airway Trust Fund.
- b. CBO's term for the surpluses that remain each year after paying down publicly held debt available for redemption. Uncommitted funds accumulate from one year to the next.
- c. Differs from the gross federal debt primarily because most debt issued by agencies other than the Treasury is excluded from the debt limit. The current debt limit is \$5,950 billion.

CBO's current estimates of the total surplus of those trust funds are similar to the ones it published in January.⁶ The Social Security trust funds continue to account for about two-thirds of that surplus—\$163 billion out of a total of \$233 billion in 2001 (see Table 1-9). More than 40 percent of the Social Security surplus results from interest earned on accumu-

lated balances in the trust funds. By 2011, the Social Security surplus is projected to reach \$345 billion (with nearly 60 percent derived from interest earned).

The Hospital Insurance Trust Fund is expected to run a surplus of about \$29 billion this year. CBO projects that figure to increase to \$45 billion in 2006 but to decline gradually in later years as per capita spending for Medicare grows and increasing numbers of baby boomers become eligible for benefits.

6. See Congressional Budget Office, *The Budget and Economic Outlook: Fiscal Years 2002-2011* (January 2001), Table 1-7.

Table 1-9.
CBO's Baseline Projections of Trust Fund Surpluses (By fiscal year, in billions of dollars)

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	Total, 2002- 2011
Social Security	152	163	176	190	204	224	242	262	283	303	323	345	2,551
Medicare													
Hospital Insurance (Part A)	30	29	38	41	42	42	45	43	43	42	39	31	404
Supplementary Medical Insurance (Part B)	[*]	-6	-1	-1	[*]	[*]	³	²	²	³	³	³	¹⁴
Subtotal	<u>30</u>	<u>23</u>	<u>37</u>	<u>40</u>	<u>41</u>	<u>41</u>	<u>48</u>	<u>45</u>	<u>45</u>	<u>44</u>	<u>41</u>	<u>34</u>	<u>417</u>
Military Retirement	6	7	7	8	9	9	10	11	11	12	13	14	103
Civilian Retirement ^a	31	32	34	34	35	36	36	37	38	38	39	40	366
Unemployment Insurance	9	4	-2	-4	-5	* [*]	1	1	*	*	1	1	-7
Highway and Mass Transit	3	-2	-3	-4	-4	-4	-4	-3	-2	-2	-1	-1	-30
Airport and Airways	2	2	2	2	2	3	3	4	4	5	6	7	37
Other ^b	<u>3</u>	<u>4</u>	<u>4</u>	<u>10</u>	<u>10</u>	<u>11</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>	<u>15</u>	<u>116</u>
Total Trust Fund Surplus	235	233	255	275	292	319	347	368	391	415	436	456	3,555
Federal Funds Deficit (-) or Surplus	<u>2</u>	<u>-80</u>	<u>-79</u>	<u>-103</u>	<u>-91</u>	<u>-75</u>	<u>-58</u>	<u>-28</u>	<u>-2</u>	<u>35</u>	<u>71</u>	<u>172</u>	<u>-158</u>
Total Surplus	236	153	176	172	201	244	289	340	389	450	507	628	3,397
Memorandum:													
Net Transfers from Federal Funds to Trust Funds	296	304	339	365	392	423	455	488	525	565	607	656	4,816

SOURCE: Congressional Budget Office.

NOTE: * = between -\$500 million and \$500 million.

a. Includes Civil Service Retirement, Foreign Service Retirement, and several small retirement funds.

b. Primarily Railroad Retirement, federal employees' health and life insurance, Superfund, and various veterans' insurance trust funds.

Chapter Two

The Economic Outlook

Although economic growth has slowed nearly to a standstill, the Congressional Budget Office believes that the economy will narrowly avoid recession and recover gradually next year. CBO forecasts that the annual rate of growth of real (inflation-adjusted) gross domestic product will slow to 1.7 percent this calendar year but increase to 2.6 percent next year (see Table 2-1 and Figure 2-1). Those forecasts are quite uncertain, however, and growth that is significantly slower—or, indeed, significantly faster—cannot be ruled out.

The slowdown that began during the second half of 2000 deepened in the first half of this year more than forecasters had expected. Spending by businesses on inventories, equipment, and software declined markedly, and exports decreased. Much of the slump in businesses' spending probably reflects over-investment in information technology and telecommunications equipment—investment that, in retrospect, could not yield the rates of return that markets expected.

So far, the manufacturing sector has borne the brunt of the slowdown. The rest of the economy has been less affected. Spending by consumers has continued to grow moderately, helping to mitigate the effects of the downturn in manufacturing. Nevertheless, the slowdown has affected the labor market: after falling nearly continuously for the past decade, the unemployment rate rose sharply in the first half of this year, climbing from an unusually low 4.0 percent at the end of 2000 to a still-low 4.5 percent by July 2001. That rate is now expected to average 4.6 percent this calendar year and 5.2 percent in 2002.

The Federal Reserve has responded aggressively to the economic slowdown, cutting its target for the federal funds rate (the rate at which banks lend excess reserves to each other overnight) seven times in eight months, for a total reduction of 300 basis points.¹ Nevertheless, other developments have obstructed some of the channels through which the central bank's actions influence the economy. For example, monetary stimulus usually lowers long-term interest rates—but they were already relatively low before the Federal Reserve took action and have remained fairly steady this year. In addition, monetary stimulus generally bolsters the stock market—but the market has stagnated since declining from last year's speculative peaks. Stimulus also tends to lower the dollar's exchange value—but slowing economic activity around the world has increased the net investment funds flowing into the United States from abroad, tending to keep the dollar strong. A decline in July and August still left the dollar's exchange value above its level at the end of 2000. On the fiscal side, the recent tax cuts enacted in the Economic Growth and Tax Relief Reconciliation Act of 2001 (P.L. 107-16) should prove to be mildly stimulative.

The rate of inflation faced by consumers, as measured by the growth of the consumer price index (CPI), is likely to average 3.2 percent this year and 2.6 percent next year, after running at 3.4 percent in 2000. The drop in that rate largely reflects CBO's view that energy prices will moderate. CBO expects that the CPI excluding energy prices will rise slightly, as a result of pressure on labor costs—despite the

1. A basis point is one-hundredth of a percentage point.

Table 2-1.
CBO's Current and Previous Economic Projections for Calendar Years 2001 Through 2011

	Forecast		Projected Annual Average	
	2001	2002	2003-2006	2007-2011
Nominal GDP (Billions of dollars)				
August 2001	10,366	10,876	13,355 ^a	17,145 ^b
January 2001	10,446	11,029	13,439 ^a	17,132 ^b
Nominal GDP (Percentage change)				
August 2001	4.0	4.9	5.3	5.1
January 2001	4.7	5.6	5.1	5.0
Real GDP (Percentage change)				
August 2001	1.7	2.6	3.2	3.2
January 2001	2.4	3.4	3.1	3.1
GDP Price Index (Percentage change)				
August 2001	2.3	2.3	2.0	1.9
January 2001	2.3	2.1	1.9	1.9
Consumer Price Index ^c (Percentage change)				
August 2001	3.2	2.6	2.5	2.5
January 2001	2.8	2.8	2.6	2.5
Unemployment Rate (Percent)				
August 2001	4.6	5.2	5.2	5.2
January 2001	4.4	4.5	4.7	5.2
Three-Month Treasury Bill Rate (Percent)				
August 2001	3.9	3.8	4.9	4.9
January 2001	4.8	4.9	4.9	4.9
Ten-Year Treasury Note Rate (Percent)				
August 2001	5.3	5.6	5.8	5.8
January 2001	4.9	5.3	5.6	5.8
Tax Bases (Percentage of GDP)				
Corporate profits (Book profits)				
August 2001	7.9	7.5	8.0	8.1
January 2001	8.9	8.5	8.2	8.0
Wages and salaries				
August 2001	48.6	48.9	48.4	48.1
January 2001	48.2	48.2	48.2	48.0

SOURCE: Congressional Budget Office.

NOTES: The August 2001 values for GDP and its components are based on data from the national income and product accounts before the July 2001 revision.

Percentage changes are year over year.

Year-by-year economic projections for calendar years 2001 through 2011 appear in Appendix B.

a. Level of GDP in 2006.

b. Level of GDP in 2011.

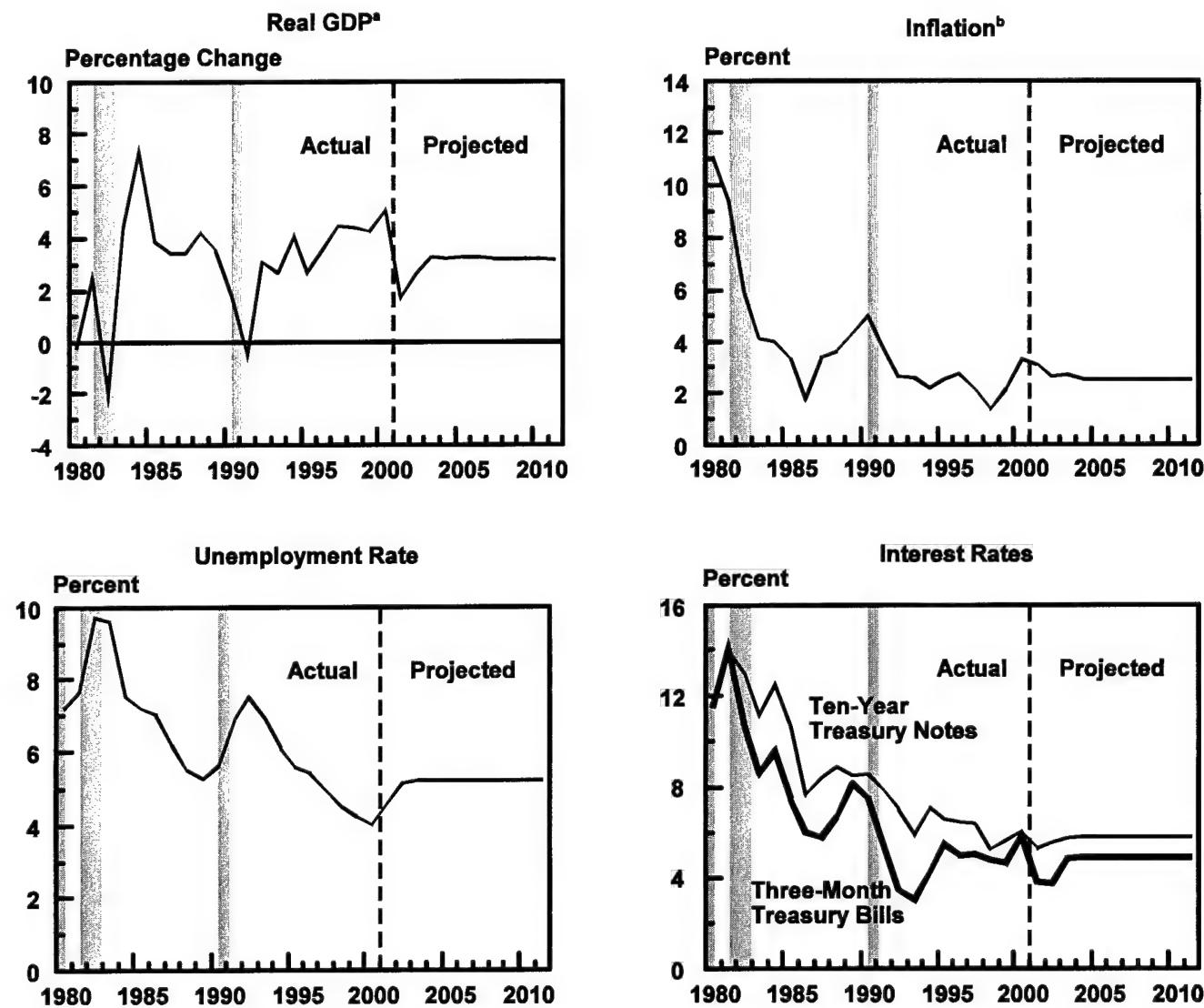
c. The consumer price index for all urban consumers.

moderate rise in the unemployment rate, the labor market remains tight relative to historical standards.

New information has rapidly changed the overall economic picture in recent months, and developments in the future could result in significantly worse

or better economic conditions than CBO currently projects. On the negative side, the economy's growth has already slowed considerably more than most forecasters anticipated, and it could slow even more over the next few quarters. Rising unemployment and the weakness of the stock market could make

Figure 2-1.
The Economic Forecast and Projections



SOURCES: Congressional Budget Office; Department of Commerce, Bureau of Economic Analysis; Department of Labor, Bureau of Labor Statistics; Federal Reserve Board.

NOTE: All data are annual values; percentage changes are year over year.

- Based on data from the national income and product accounts before the July 2001 revision.
- The change in the consumer price index for all urban consumers, applying the current methodology to historical price data (CPI-U-RS).

Box 2-1.
Recent Revisions to the National Income and Product Accounts

The Congressional Budget Office (CBO) uses data from the national income and product accounts (NIPAs) to produce key components of its forecast, such as gross domestic product (GDP), spending by consumers, investment, and wages and salaries. The NIPAs, which are produced by the Commerce Department's Bureau of Economic Analysis (BEA), track the level and composition of GDP and how the costs of production are distributed as income. BEA regularly revises the NIPAs to incorporate both newly available and more reliable source data and new methods for compiling GDP.¹ The revisions, which typically cover the previous three years and the first quarter of the current year, are released each July.

Although CBO completed its economic projections before the release of the most recent revisions to the NIPAs, it evaluated how the revised data would have affected the projections had those data been available. Several of the revisions could, in principle, substantially change CBO's forecast if the revised data were used in place of the unrevised series. With respect to CBO's medium-term projections, the four most significant changes to the NIPAs involved real (inflation-adjusted) GDP, wages and salaries, corporate profits, and the statistical discrepancy (the difference between the income and product measures of economic activity).

1. See Department of Commerce, *Survey of Current Business* (August 2001), available at www.bea.doc.gov/bea/pub/0801cont.htm.

As a result of the revisions, growth of real GDP as measured by the NIPAs fell by 0.1 percentage point for 1998 and 1999 and by 0.9 percentage points for 2000. That drop occurred largely because BEA incorporated newly available Census Bureau data for businesses' investment spending on software. Also contributing to the change for 2000 were new estimates of consumer spending on services and nondurable goods as well as new estimates of business construction.

The revisions to wages and salaries and corporate profits for 2000 moved those categories in different directions. Wages and salaries climbed by \$68 billion, to \$4,837 billion; the estimate of pretax corporate profits declined by \$80 billion, to \$845 billion. For 2000, BEA's upward revision to wage and salary growth resulted in growth of compensation per hour that was 1.0 percentage point faster. The new estimate for wages and salaries, which reflected new tabulations of wages from the unemployment insurance program, also accounted for BEA's upward revisions to other estimates of household financial indicators, such as personal income, disposable income, and household savings. In contrast, newly available data from the Internal Revenue Service caused BEA to revise profits downward for the entire period covered by the revision (1998 through 2000). Net cash flow and corporate savings were also revised downward.

The revisions reduced both nominal GDP and nominal gross domestic income (GDI) for 2000, but whereas nominal GDP dropped by \$90 billion, nomi-

consumers retrench and cut their spending. The overhang of the capital stock may be even greater than is currently estimated, and the demand for capital goods could stagnate longer than CBO expects. Strong growth in wages could raise unit labor costs and squeeze corporate profit margins to a greater degree than forecasters anticipate, reducing the returns on—and the resources available for—new investment. Weakness in foreign economies could also impede U.S. economic growth through greater-than-expected restraint on exports and stimulation of imports. Recent changes in monetary and fiscal policy will tend to counter any further deterioration, but

their effects tend to be gradual, and the economy's overall response to them is not yet clear.

Despite widespread concerns about the risk of recession, the economy could also grow much faster than CBO anticipates. For example, the slowdown in capital and inventory investment may be nearly over, and businesses may be poised to resume investing at their earlier, higher rates. Moreover, if investors become confident that inflation is not likely to pick up, long-term interest rates could fall, providing even more encouragement to investors. Exports might also strengthen if investors gain confidence in the euro

Box 2-1.
Continued

nal GDI fell by only \$43 billion. In theory, GDP and GDI should be equal, but they are compiled from different source data and therefore always vary somewhat: the difference is referred to as the statistical discrepancy. For reasons that are not clear, the NIPAs have generally shown GDI growing faster than GDP since the mid-1990s, and the most recent revisions now show GDI growing faster than GDP by more than half a percentage point over the past few years. BEA maintains—and economists generally accept—that GDP measures recent economic activity more reliably than GDI does because the source data appear to be more reliable for the product side of the accounts. The growing discrepancy, however, increases the uncertainty of the relationship between income and GDP. Given that the future growth of income forms the basis for forecasting revenues, that greater uncertainty makes it more difficult to interpret the revisions' significance for the economic outlook.

The July revisions to the NIPAs caused a corresponding revision in the Bureau of Labor Statistics' estimates of the growth of productivity and hourly compensation, which are based in part on NIPA data. The most commonly cited estimates of productivity derive from the NIPA measure of nonfarm business output, a large component of overall GDP. Growth in nonfarm business output was reduced by 0.2 percentage points for 1998 and 1999 and by 1.2 percentage points for 2000. Since the annual data for growth in hours worked changed only slightly, productivity growth was cut by similar amounts for those years.

and the dollar weakens, or if foreign economies grow more than expected.² Should such circumstances develop, the recent round of tax and interest rate cuts could trigger a more rapid economic upturn than anyone would have expected.

Looking out over the medium term (the next decade), CBO believes that despite the current slowdown, the evidence still indicates that the U.S. econ-

However, the growth rate of productivity was revised upward slightly from the fourth quarter of 2000 onward. As a result, revised productivity figures show less cyclical movement than the unrevised data.²

The large upward changes to the growth of compensation and unit labor costs, combined with downward revisions to real GDP growth, productivity growth, and the level of profits in 2000, helped resolve a puzzling pattern in the previous data. Economists had felt that the tight labor markets that prevailed in 1999 and 2000 should have led to higher growth of labor costs and lower profits than the data indicated, and in fact the revisions mainly confirmed those outcomes.

Although the revised NIPA data could change elements of CBO's economic outlook, their effect on the overall budget outlook is ambiguous and probably minor. CBO's projections of future tax revenues draw on the income side of the NIPAs, which the revision cut less than it did the GDP data (the product side). The revisions to the income side also imply changes in effective tax rates—that is, revenues divided by NIPA income. Those changes could easily offset any changes in projected revenues, leaving the effect of the revisions on the budget ambiguous.

2. See "Productivity" at the Bureau of Labor Statistics' Web site, www.bls.gov.

omy has entered a period of faster growth in productivity. CBO still expects growth of real GDP to average 3.0 percent during the 2001-2011 period, the same rate CBO projected in January (although the level of real GDP in 2011 in the current projection is slightly below the January estimate). Nevertheless, CBO's medium-term outlook incorporates several important changes. For example, the recent slowdown has reduced both current and expected rates of investment. Those declines, together with a reduction in projected surpluses, have led CBO to modestly lower its medium-term projection of labor productivity growth. That revision is offset, however, by an increase in the projection of labor force growth.

2. The European Union plans to complete the phase-out of national currencies and introduction of the euro as its single currency in January 2002. However, investors remain uncertain about whether the transition will be accomplished smoothly and about the value at which the euro will stabilize following the transition.

CBO completed its economic and budget projections before release of the most recent revisions to the national income and product accounts (NIPAs). As a result, the updated budget outlook presented in this report does not reflect those revisions. CBO's analysis suggests that the revised data could change elements of the economic outlook; their effect on the overall budget outlook could be positive or negative but is likely, on balance, to be small (see Box 2-1 on page 24).

Recent Economic Developments

Data from the first half of 2001 provide a confusing picture of the economy, with a number of indicators

showing serious weakness and others pointing to continued moderate growth. Economic activity has slowed considerably more than most forecasters expected six months ago. Manufacturing output and employment are down, and investment in business equipment has slumped. Growth in employment outside the manufacturing sector also shows some signs of slowing. Weakness in foreign economies and a strong dollar have hurt exports.

However, even though the economy has not experienced such a marked decline in both industrial activity and employment since World War II without going into recession, consumers are still enjoying modest growth in their income, and their spending continues to increase at a healthy pace. Residential investment was strong throughout the first half of 2001, reflecting the continued affordability of housing. The difference between interest rates on high-

Box 2-2. What Is a Recession?

A commonly reported definition of a recession is that it is two consecutive quarters of economic decline—that is, six months during which the rate of growth of real (inflation-adjusted) gross domestic product, or GDP, is negative. In fact, however, “recession” has no exact quantitative definition. For most of the post-World War II era, the National Bureau of Economic Research (NBER) has been the generally accepted judge of whether and when the economy has entered a recession. The NBER defines recession as “a significant decline in activity spread across the economy, lasting more than a few months, visible in industrial production, employment, real income, and wholesale-retail trade.”¹ The NBER tries to develop a monthly chronology of recessions; it therefore emphasizes monthly indicators over quarterly data, such as data from the national income and product accounts. Of those monthly measures, the NBER considers total employment, real personal income, and aggregate hours worked to be the most important. However, it also considers quarterly data on real GDP to be informative.

During the past four quarters, only the manufacturing sector has seen a significant decline in economic activity. Other overall measures of the economy, such as real income, have continued to grow, and payroll employment has experienced only a minor drop (even though the unemployment rate has risen). Retail trade has fallen relatively little. As of early August, the NBER’s Business Cycle Dating Committee had yet to decide that the available data warranted a meeting to discuss the possibility that a recession was under way.

However, the lack of an official designation does not mean that the economy is not in a recession. Macroeconomic data take time to collect, compile, and publish, and initial estimates are based on preliminary data. Therefore, the economy can be in a recession for some time before enough information becomes available for economists to determine that a recession has, indeed, occurred. The Business Cycle Dating Committee does not determine the start or end of a recession until it has at least six months of data that are consistent with a sustained downturn. Thus, despite the Congressional Budget Office’s relatively optimistic view of the economy today, there is still a slight chance that the official data will reveal—and the committee declare—that a recession began during the first half of 2001.

1. See the discussion of recessions on the bureau’s Web site, “The NBER’s Recession Dating Procedure in the Light of Current Developments,” at www.nber.org/cycles/recessions.html.

quality and lower-quality bonds—which in part reflects a premium for the risk of default—has remained fairly stable, suggesting that financial markets do not expect conditions in the corporate sector to worsen. Given those indicators, determining whether or not the economy is sliding into recession has proved difficult (see Box 2-2).

Consumer Spending and Residential Investment

Consumers are currently the primary source of growth in the economy. Their spending, adjusted for inflation, grew at an annual rate of 2.8 percent in the first half of 2001, while real GDP grew by only about 1.3 percent. Residential investment has also grown faster than GDP. Housing starts remain strong, and sales of new homes are still near record levels.

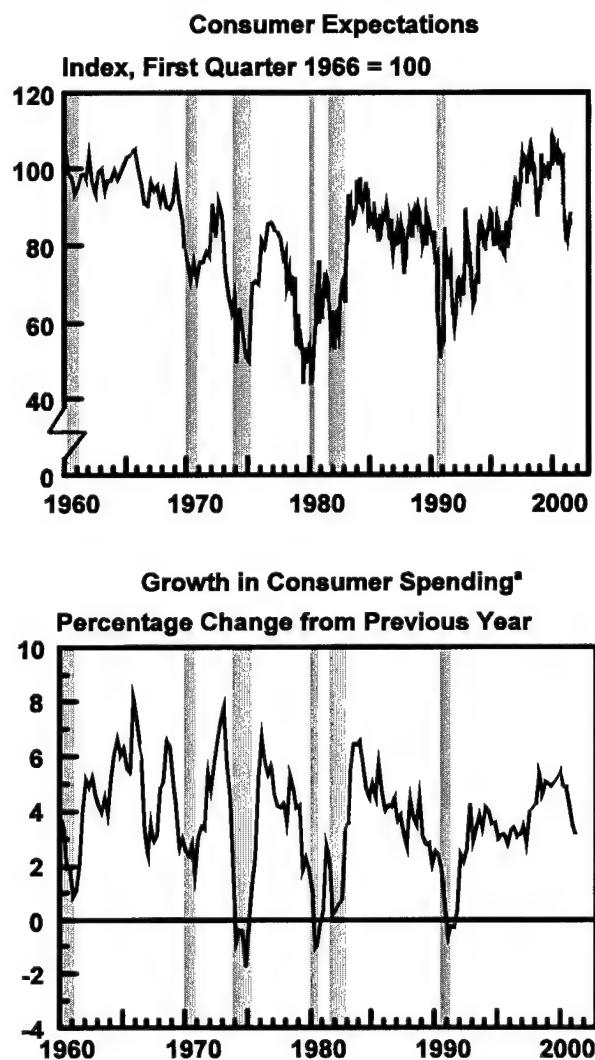
The strength of both consumer spending and residential investment is somewhat surprising given the series of adverse shocks that consumers have experienced over the past year. Many observers expected that the combination of lower stock market values, rising energy prices, burgeoning consumer debt burdens, slowing economic activity, and mounting unemployment would have a dampening effect on consumers' confidence in the economy and, consequently, on their spending. Confidence and spending growth have, in fact, declined considerably, but not to levels that could be deemed recessionary (see Figure 2-2).

Positive aspects of the current economy may have provided consumers with enough good news to offset some of its negative aspects. Although the unemployment rate has risen, it remains very low; and the strong dollar enhances consumers' ability to afford imported goods and services. Rising prices for existing homes have offset some of the loss of wealth in the stock market. Mortgage rates remain well below last year's average levels, encouraging people to buy new homes and homeowners to refinance their current ones with larger mortgages—with the goal, in some cases, of withdrawing some equity to spend or to pay down other debts. Consumers' spending may also have been supported by their expectations of tax rebates, which have already begun, and the scheduled reduction in tax rates in future years.

Business Investment

In contrast to the health of consumer spending and residential investment, business investment in equipment and inventories has all but collapsed. With industrial production in June down by over 4 percent from last year's record high, stock markets well off their peaks, and corporate profits falling since mid-2000, the growth of business investment in durable

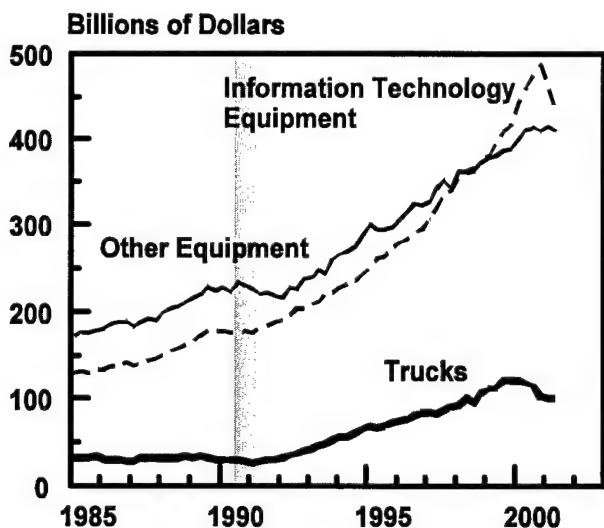
Figure 2-2.
Consumer Sentiment and Spending



SOURCES: Congressional Budget Office; University of Michigan, Consumer Expectations Survey; Department of Commerce, Bureau of Economic Analysis.

a. Consumer spending is in chained 1996 dollars.

Figure 2-3.
Investment in Producers' Durable Equipment



SOURCES: Congressional Budget Office; Department of Commerce, Bureau of Economic Analysis.

equipment and software declined much more sharply during the first half of 2001 than forecasters expected (see Figure 2-3). Meanwhile, businesses in many sectors swung from accumulating inventories to running them down as they struggled to cope with lower-than-expected demand (see Figure 2-4). The swings in investment in equipment and software and in inventories accounted for essentially all of the slowdown in GDP growth from the second quarter of 2000 to the second quarter of 2001.

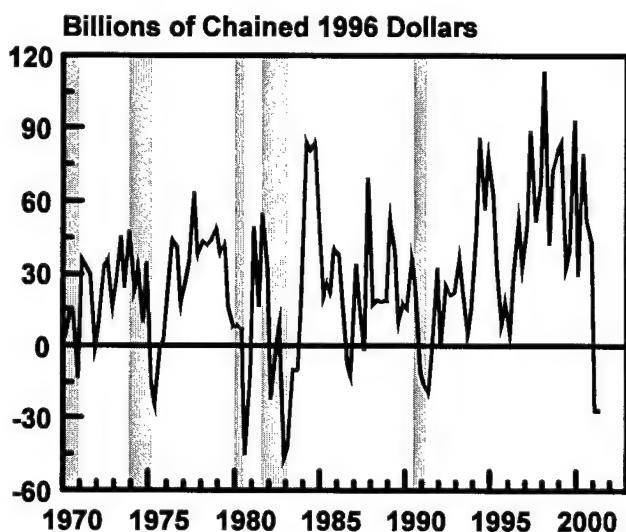
That downturn has been concentrated in investment in trucks and information technology, which includes computers, peripherals, software, and communications equipment. The slowdown in information technology may be partly a result of some firms' past overinvestment.³ Many of those firms were highly competitive companies in the information and communications sectors that invested in emerging technologies in hopes of dominating their markets. Analysts' estimates of the total level of business

3. Overinvestment occurs when businesses make decisions about purchasing capital equipment on the basis of assumptions about the future growth of their markets that turn out to be unrealistic. As a result, the investments yield considerably lower returns than the businesses initially expected.

overinvestment in information and communications equipment range from near zero to almost \$200 billion—compared with an annual rate of investment in information technology of roughly \$450 billion. Depending on the extent of the overinvestment, it may be some time before investment growth resumes and businesses begin investing again at the levels of the past few years.

In contrast to businesses' spending on equipment, their spending on construction was relatively strong through the first quarter of 2001. For much of the past year and a half, that spending was buoyed by a surge in drilling activity (a response to high prices for crude oil and natural gas) and by continued laying of fiber-optic cable, one of the sectors in which there is thought to have been overinvestment. Nonresidential building activity declined sharply during the second quarter of 2001, however, and with energy prices moderating, possible excess capacity in fiber-optic cable, and vacancy rates on the rise for both industrial facilities and offices, even the stimulus of lower interest rates appears unlikely to prevent spending on nonresidential construction from declining further during the second half of the year.

Figure 2-4.
Change in Inventories



SOURCES: Congressional Budget Office; Department of Commerce, Bureau of Economic Analysis.

The International Sector

Economic conditions abroad have also deteriorated rapidly, partly in response to the U.S. slowdown. The slump in Germany is deepening, stalling growth in the rest of Europe, and the euro itself faces uncertain prospects pending the completion of its introduction in early 2002. The Japanese economy has slowed further, affecting growth in the rest of Asia. The precarious economies of Argentina and Turkey raise the possibility of another round of global financial stress.

In that international context, the dollar strengthened against most other currencies during the first half of 2001 until a summer correction reversed much of the gain. The appreciation occurred despite the slowing U.S. economy, the decline of domestic interest rates, and the collapse of the bubble of speculative investment in information technology. The nation has continued to receive significant inflows of international capital, probably reflecting a consensus among international investors that the U.S. economy is fundamentally more sound than economies abroad, that the United States remains a safe harbor for savings, and that the dollar is a less risky currency than the euro or the yen. It is too early to judge whether the dollar's depreciation this summer reflects a major shift in the perceptions of international investors. In either case, the dollar remains very strong in historical terms.

The weakening of foreign economies and the strengthening of the dollar have combined to dampen foreign demand for U.S. exports. Real exports declined by more than 4 percent annually during the first half of 2001. Consequently, even though real imports also fell by over 4 percent because of the slowdown in domestic demand, the trade deficit decreased only modestly in the first six months of the year. The strength of the dollar and the faster rate of deterioration expected in foreign economies suggest that the trade deficit is unlikely to narrow much more in the second half of 2001.

The Labor Market

The labor market has deteriorated significantly while remaining strong by historical standards. One mea-

sure of employment, total payroll employment, continued to grow during the first quarter of 2001 but fell during the second quarter. In contrast, the household measure of employment declined continuously during the first half of the year. The unemployment rate rose sharply, from around 4.0 percent in December to 4.5 percent in July, and only a decline in the labor force kept it from rising even more.

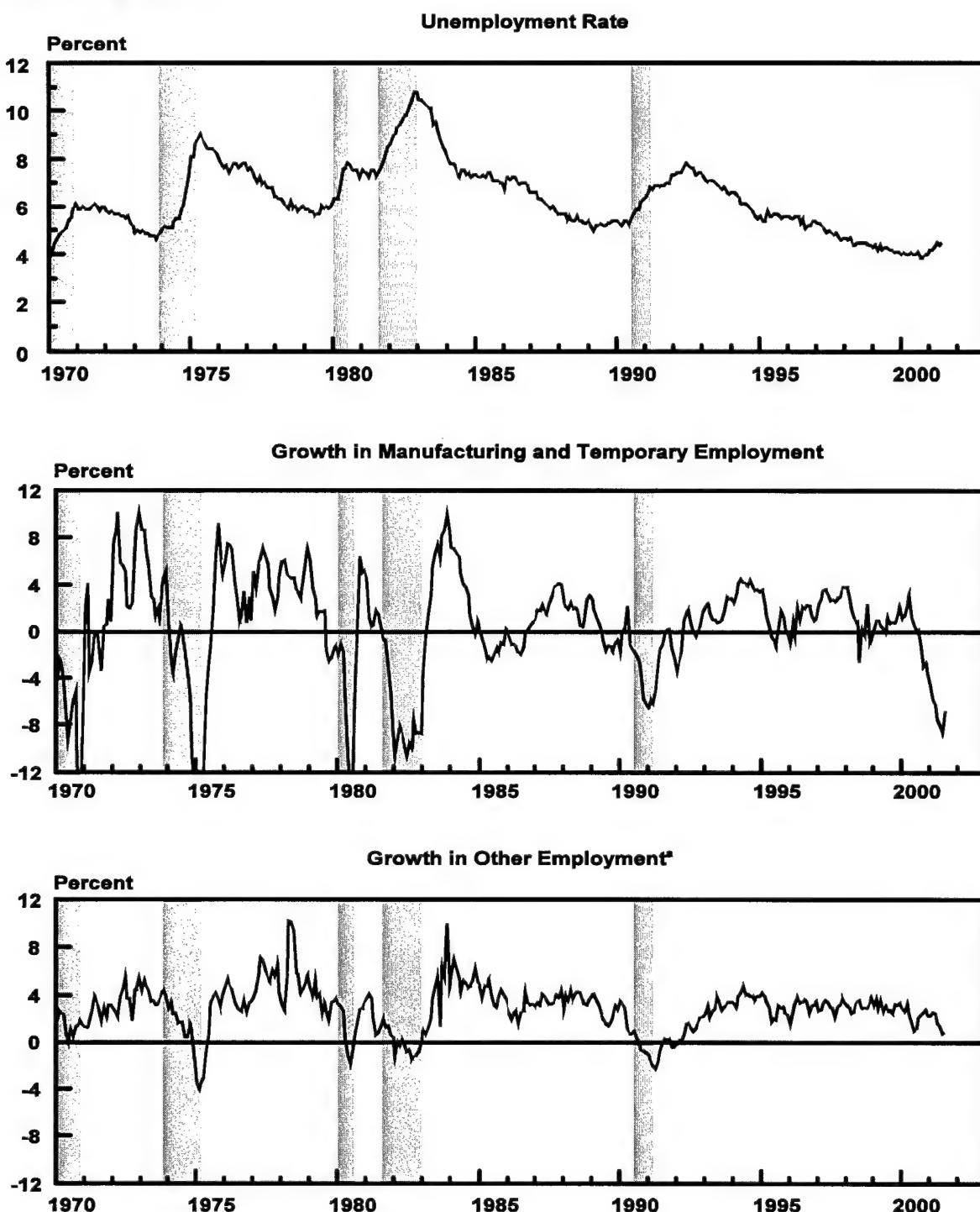
Although the slump in employment has been concentrated mainly in the manufacturing sector and among temporary workers—many of whom are employed in that sector—in recent months there have been some signs that the weakening of demand for labor is spreading beyond the manufacturing sector (see Figure 2-5). As a result of cutbacks in employment, initial claims for unemployment insurance rose during the first half of the year to a level seen only in past recessions. In percentage terms, the Help Wanted Index—an indicator of employers' demand for new workers—fell nearly as much as it has in previous recessions, and the index of aggregate hours worked fell at an annual pace of 1.5 percent during the second quarter.

Despite the recent weakening, the labor market remains strong by historical standards. The unemployment rate remains well below its level just prior to the 1990-1991 recession—indeed, aside from the very low levels of the past three years, the unemployment rate is lower than at any time since 1970. A further positive sign is that initial claims for unemployment appear to have stabilized in recent months. Although conditions could deteriorate further, the current rate of economic growth seems likely to support a stable level of employment. Because the trend growth of the labor force is over 1 percent per year, however, employment will have to grow to keep the unemployment rate from rising.

Wages and Prices

The continuing relatively strong demand for labor has accelerated the growth of nominal labor compensation per hour over the past year. The growth of real compensation may also be gradually adjusting upward to reflect the shift to the higher trend rate of long-term productivity growth that occurred during the last half of the 1990s.

Figure 2-5.
Measures of Employment



SOURCES: Congressional Budget Office; Department of Labor, Bureau of Labor Statistics.

NOTE: Employment measures are three-month moving averages based on data from the Department of Labor's establishment survey.

a. Excludes manufacturing workers and temporary help.

Both wages and nonwage compensation (such as medical, pension, and other benefits) climbed much faster than overall prices. Compensation in the nonfarm business sector grew at an average annual rate of 7.4 percent between the first quarter of 2000 and the first quarter of 2001, after growing by about 5.4 percent per year over the previous three years.

The increasing rate of growth of compensation has helped spur a pickup in the growth of labor costs per unit of output. After rising 2.8 percent between the first quarter of 1999 and the first quarter of 2000, unit labor costs grew 4.8 percent over the next four quarters (see Figure 2-6). The rise in unit labor costs stems only partly from gains in compensation, however: firms tend to retain workers during a slowdown in anticipation of a turnaround in demand, causing the rate of productivity growth to decline temporarily and unit labor costs to escalate in tandem.

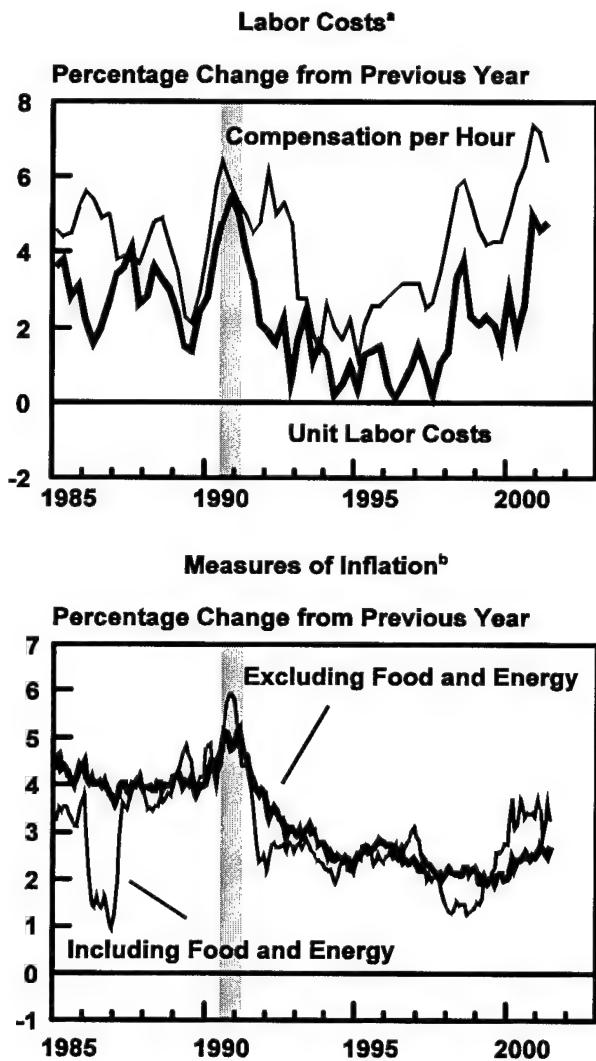
Although the recent behavior of consumer prices has strengthened anxieties about inflation, most of the rise in prices appears to be temporary. As measured by the consumer price index for all urban consumers (CPI-U), prices rose more rapidly in both 2000 and the first half of this year than they did over the previous eight years. The bulk of that increase, however, stemmed from higher energy prices, which have recently begun to ease. The underlying rate of inflation—commonly measured as the CPI-U inflation rate for all goods and services excluding food and energy—has also been trending upward over the past year and a half (see Figure 2-6). But its increase has been relatively gradual and, rather than being broadly based, has been dominated by a few categories of services.

Monetary and Fiscal Policy

Recognizing the potential severity of the slowdown during the first half of the year, policymakers moved to provide monetary and fiscal stimulus and reduce the chances of a recession. The Federal Reserve acted aggressively, lowering its target for the federal funds interest rate from 6.5 percent at the beginning of the year to 3.5 percent by the end of August—the first time since the mid-1980s that the central bank lowered the target as much in an eight-month period.

The Federal Reserve's actions have steadied financial markets and probably moderated the impact of the economic downturn. Short-term interest rates have fallen roughly in tandem with the federal funds

Figure 2-6.
Measures of Labor Costs and Inflation

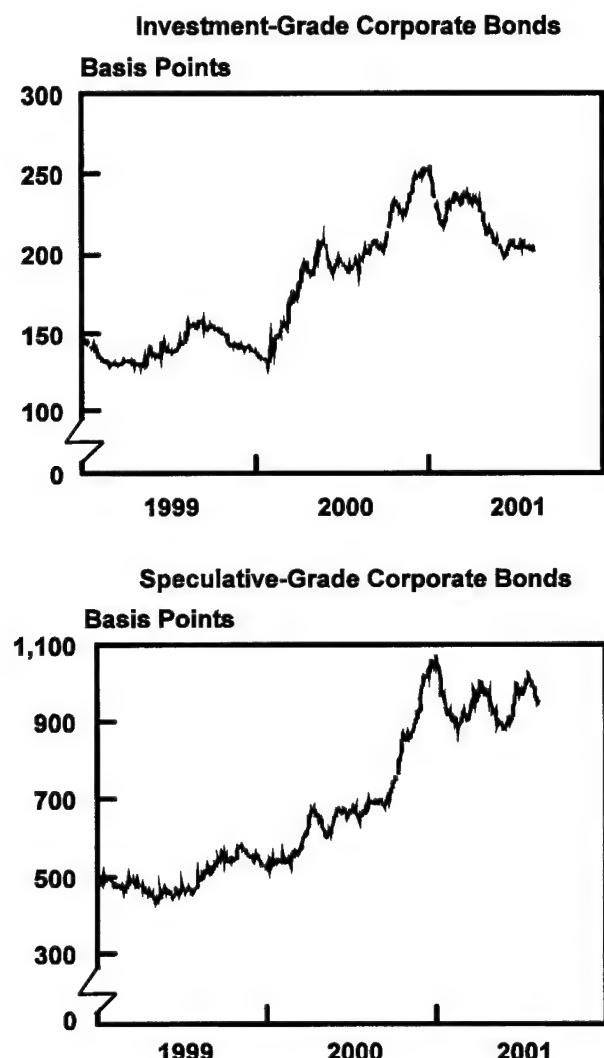


SOURCES: Congressional Budget Office; Department of Labor, Bureau of Labor Statistics.

- For the nonfarm business sector.
- Based on the research series for the consumer price index for all urban consumers (CPI-U) published by the Bureau of Labor Statistics. The research series provides a measure of price change for past years that is consistent with current methods for compiling the CPI-U.

rate this year, lowering the cost of short-term credit. Mortgage rates, which dropped during the second half of last year and into the first quarter of this year, have remained at levels that encourage people to buy new homes and refinance older ones. The yield curve—for example, as measured by the difference between the interest rates on 10-year Treasury notes

Figure 2-7.
Interest Rate Spreads



SOURCES: Congressional Budget Office; Standard & Poor's Risk Solutions credit indices.

NOTE: The spread is measured as the difference between interest rates on investment-grade and speculative-grade corporate bonds and those on Treasury securities of comparable maturity. Vertical axes of graphs differ.

and three-month Treasury bills—has steepened and reverted to its usual upward slope. That change suggests that investors in the bond market expect the economy to strengthen in the near future, bringing about some combination of higher inflation and higher real short-term interest rates.

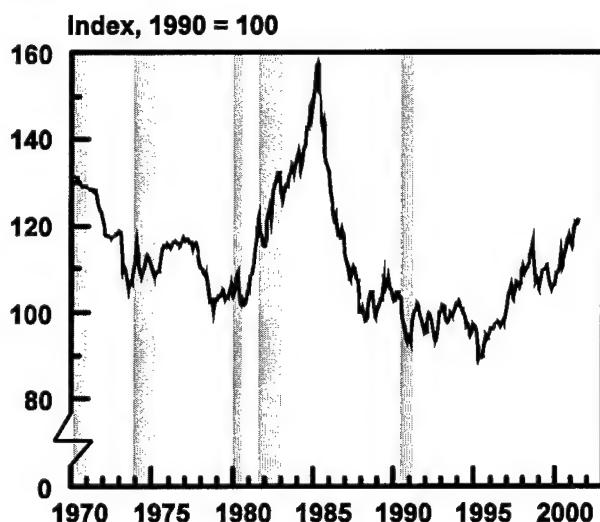
However, downgrades and default rates on corporate bonds have accelerated, and investors' concerns about the risk of default remain high. Interest rate spreads between investment-grade corporate bonds and Treasury securities of comparable maturity have not increased this year and remain only modestly above their lows of the late 1990s. But concern is more evident in the market for speculative-grade bonds, where the spread rose markedly last year and remains high (see Figure 2-7). That spread probably reflects the lower growth prospects of the information technology sector.

Moreover, some of the channels through which the Federal Reserve's actions stimulate the economy and encourage growth appear to be blocked to some extent by developments outside the Federal Reserve's control. Commercial banks, although in a better position to lend as a result of the central bank's actions, have kept commercial and industrial lending standards relatively tight out of concern about downgrades and default rates. In addition, monetary policy's usual effects on long-term interest rates, the exchange value of the dollar, and the stock market have been muted thus far.

Long-Term Interest Rates. Although long-term interest rates fell sharply during the second half of 2000 as the economy slowed and projections of federal surpluses rose, they have remained relatively level this year despite the substantial decline in the federal funds rate. That stability may reflect investors' anticipation of economic recovery, or of the future acceleration of inflation, or both. It is also possible that slower economic growth and the new tax law, by lowering projected surpluses, have raised investors' expectations about the federal government's future demand for credit.

The Exchange Value of the Dollar. An unexpected response to the recent monetary stimulus has been the behavior of the dollar in international exchange markets. The exchange value of the dollar rose this year

Figure 2-8.
Exchange Rate



SOURCE: Congressional Budget Office based on the J.P. Morgan trade-weighted exchange rate index.

to its highest level since the mid-1980s, despite lower short-term interest rates and a greater weakening of U.S. economic activity than in the rest of the world. Indeed, even this summer's reversal has left the dollar very strong in historical terms (see Figure 2-8).

The Stock Market. The effects of the Federal Reserve's monetary actions on equity markets are difficult to discern. Monetary stimulus generally bolsters the stock market, but at the end of July all of the major indexes of stock prices remained below their year-end levels. The weakness in the Nasdaq index may largely reflect a major correction by investors in their estimate of the future profitability of the technology sector. Such a correction tends to obscure any positive effect of the Federal Reserve's actions. However, the Dow Jones Industrial Average has not been heavily influenced by the drop in high-tech stocks, and it has changed little, on balance, this year.

Federal fiscal policy is also at work to counter the economic slowdown. The recently enacted tax legislation, which cuts individual income taxes in various ways, includes an initial rebate of taxes payable on income earned in 2001. The rebate is intended to ensure that the increase in consumer spending that the tax law is expected to foster starts immediately. (The longer-run effects of the tax cuts on

labor supply and capital formation are discussed in Box 2-3.)

CBO's Economic Forecast for 2001 and 2002

CBO projects that growth of real GDP will average 1.7 percent in calendar year 2001 and 2.6 percent in 2002 (see Table 2-2). Those rates are well below the estimated rate of growth of potential GDP and significantly lower than the average annual growth rate of 4.3 percent for the 1996-2000 period. CBO expects that consumer spending will continue to drive the economy's expansion, maintaining a level of demand that will prevent the downturn in manufacturing from causing a recession. The CPI-U is likely to rise by 3.0 percent over the four quarters of this year and 2.7 percent next year, reflecting CBO's expectation

Table 2-2.
CBO's Forecast for 2001 and 2002

	2001	2002
Fourth Quarter to Fourth Quarter (Percentage change)		
Nominal GDP	4.1	5.4
Real GDP	1.7	3.1
GDP Price Index	2.3	2.3
Consumer Price Index ^a		
Overall	3.0	2.7
Excluding food and energy	2.8	2.7
Calendar Year Average		
Real GDP (Percentage change)	1.7	2.6
Unemployment Rate (Percent)	4.6	5.2
Three-Month Treasury Bill Rate (Percent)	3.9	3.8
Ten-Year Treasury Note Rate (Percent)	5.3	5.6

SOURCE: Congressional Budget Office.

NOTE: The values for GDP and its components are based on data from the national income and product accounts before the July 2001 revision.

a. The consumer price index for all urban consumers.

Box 2-3.**The Long-Term Macroeconomic Effects of the Economic Growth
and Tax Relief Reconciliation Act of 2001**

In the first half of 2001, the Congress passed and the President signed the Economic Growth and Tax Relief Reconciliation Act of 2001 (Public Law 107-16), which is expected to reduce surpluses by a total of almost \$1.4 trillion from 2001 to 2011. Among other things, the new law will create a 10 percent tax bracket, reduce other individual income tax rates, increase the child tax credit, reduce the so-called marriage penalty, eliminate the estate tax, and change tax provisions for individual retirement accounts (IRAs) and pensions. Some provisions of the legislation phase in over a period of years; others phase out (see Chapter 1 for a more complete description). The entire law “sunsets,” or expires, in 2011.

In terms of the anticipated revenue losses from P.L. 107-16, the reductions in tax rates are the most important, accounting for almost \$875 billion over the 2001-2011 period. Of that amount, half results from the creation of the 10 percent tax bracket, and the other half comes from across-the-board rate cuts. The provision generating the next-largest revenue loss is the child tax credit, which reduces tax receipts by \$172 billion, followed by the estate and gift tax provisions, which cut revenues by \$138 billion.

Analysis of the law’s economic effects is complicated by the sunset mechanism built into it, which establishes expiration dates for all of its provisions. People’s expectations about the law’s expiration could affect their decisions regarding consumption, work, and saving over the next 10 years. But whether people actually expect the law to remain unchanged over the next decade is unclear. For the purposes of its economic forecast—although not for its budget calculations—the Congressional Budget Office (CBO) has ignored the expirations in 2011. In addition, CBO has not analyzed the macroeconomic effects of the estate and gift tax provisions. Whether those effects would enhance growth depends on why households decide to make bequests and gifts, and those motivations are unclear.

The cumulative effects of the new tax law on the economy are uncertain but will probably be small. Labor supply may rise modestly as a result of the reductions in marginal tax rates (the rates that apply to the last dollar earned); however, national saving may fall. Whether the tax cut will raise or lower real (inflation-adjusted) gross domestic product (GDP) in the long run is unknown, but any effect is likely to be less than half of a percentage point in 2011.

Effects on the Economy

Tax cuts can affect the economy in many ways. In the short run, they can raise the total spending on goods and services and complement the efforts of the Federal Reserve to keep the economy growing. But that effect dissipates over time. In the long run, tax cuts can affect the productive capacity of the economy by altering the size and quality of the labor force, the accumulation of private capital through saving, and the pace of technological change.

Some provisions of the tax cut legislation may create incentives for people to work or save more. They include the reductions in marginal tax rates, some of the provisions that alleviate the marriage penalty, and changes in the tax treatment of IRAs.

Other provisions, however, may have the opposite effect. For example, boosting the child tax credit is likely to diminish the supply of labor because the credit will raise families’ after-tax income, lessening the incentives for second earners in those families to work. More generally, any provision that provides additional income to households but does not affect their incentives to work or save will reduce work effort and saving.

CBO estimates that by 2006, the tax legislation as a whole will decrease the average effective marginal tax rate on income from labor by about 1.8 percentage

Box 2-3.
Continued

points (or 5 percent of the current tax rate) and the average effective marginal tax rate on capital by 0.5 percentage points (or 2.7 percent of the current tax rate).¹ The effective tax rate on capital income does not decline as much as the rate on labor because individual income taxes account for only a portion of all taxes on capital.

Effects on Labor Supply

P.L. 107-16 may have a small positive effect on the supply of labor, amounting to between 0.1 percent and 0.4 percent by 2011. That effect would probably be somewhat larger in 2006 because the cuts in marginal rates will be fully phased in by that time. However, in later years, an increasing number of taxpayers will not receive a tax cut because they will be subject to the alternative minimum tax (see Chapter 1).

Effects on National Saving

The new tax law's overall effect on saving depends on how it changes both government and private saving. On one hand, compared with current law, government saving will decline because the Treasury will collect less revenue. On the other hand, private saving will probably rise because the tax legislation reduces marginal tax rates on capital income and thus enhances the incentives for people to save. The legislation also provides some motivation for low-income people to increase their saving by offering a nonrefundable credit for contributions to their IRAs or 401(k) plans. Nevertheless, private saving is unlikely to rise high enough to fully offset the loss of government saving.

1. Those estimates reflect the percentage change in the total tax on labor and capital. For labor, that total includes federal income taxes, payroll taxes, and state and local income taxes; for capital, it includes federal income taxes, corporate taxes, and state and local income taxes.

The way in which tax cuts are financed strongly affects national saving. A reduction in tax rates, accompanied by a comparable reduction in government spending, would tend to increase national saving. By cutting spending, the government would free up resources to finance the tax cut, and lower marginal tax rates would increase people's incentives to work and save, thus boosting economic growth.

In contrast, if a tax cut was financed by increasing government borrowing to cover current spending and raising tax rates in the future to finance the higher debt burden, national saving and GDP would probably fall in the long run, relative to what they would have been without the tax cut. In addition, tax rates might eventually be higher than they would have been had taxes not been reduced, because additional revenues would be needed to finance the higher interest charges on government debt held by the public. In turn, those higher tax rates could reduce GDP and economic efficiency below what they would have been otherwise.

Other Potential Effects

Many people believe that tax policy can also affect the economy by changing the environment for entrepreneurship and innovation. Recent studies measuring the willingness of people to leave salaried jobs and start small businesses have found evidence suggesting that lower marginal tax rates significantly encourage entrepreneurship.² How that encouragement translates into innovations and productivity improvements remains to be established, although some effect appears likely.

2. R. Glenn Hubbard and William M. Gentry, "Tax Policy and Entrepreneurial Entry," *American Economic Review*, vol. 90, no. 2 (May 2000), pp. 283-287; and Mark H. Showalter and Norman K. Thurston, "Taxes and Labor Supply of High-Income Physicians," *Journal of Public Economics*, vol. 66, no. 1 (October 1997), pp. 73-97.

that inflation from rising energy prices will abate and inflationary pressures from mounting unit labor costs will be moderate. The slack pace of growth, combined with the Federal Reserve's recent interventions, will help to keep short-term interest rates below their 1999-2000 levels. Long-term rates are likely to fall only slightly in 2001.

CBO's current forecast represents a significant downward revision from its forecast in January 2001 (see Table 2-1 on page 22). Growth of real GDP is nearly a full percentage point lower for 2001 in CBO's new estimates, and the unemployment rate is higher. Consumer price inflation in 2001 is higher than in the January forecast because of the rise in energy prices in the first half of the year, but it is lower than last winter's forecast in 2002 as energy prices fall. In contrast, the GDP price index is the same as in last January's forecast for 2001 but is slightly higher for 2002 because of a revised outlook for prices of investment goods. Because of the Federal Reserve's actions, the forecast for short-term interest rates is lower, although the forecast for long-term interest rates is slightly higher. CBO's downward revisions of the projected growth of GDP are in line with those of other forecasters (see Table 2-3).

Growth of Real GDP

CBO's short-term forecast for real GDP is based on the view that consumers will remain the primary source of growth in the economy during the coming year. Despite the losses many people have experienced in a bearish stock market, consumers' income and spending will continue to grow, supported in part by the recent tax cuts and by persistent growth in compensation in a still-tight labor market. Residential investment is expected to fall only slightly from recent peaks, upheld by expanding incomes and moderate mortgage rates.

Continued growth in consumer spending is likely to boost businesses' investment in inventories in the near term, but their investment in plant and equipment is likely to remain modest, restrained by a combination of factors. For some businesses, lower profits and slightly less access to credit and equity financing will constrain their ability to fund new investment. At the same time, the overhang of previous investment spending, combined with slower growth of sales, will limit businesses' desire to make new investments. A further source of weakness is the foreign sector: the demand for exports is expected to

Table 2-3.
Changes in Four Forecasters' Estimates for 2001 (In percent)

	Growth of Real GDP ^a		Growth of GDP Price Index ^a		Average Three-Month Treasury Bill Rate	
	January 2001 Forecast	August 2001 Forecast	January 2001 Forecast	August 2001 Forecast	January 2001 Forecast	August 2001 Forecast
Blue Chip	2.7	1.7	2.1	2.3	5.4	3.8
DRI	2.8	1.3	2.0	2.3	5.5	3.9
Macroeconomic Advisers	2.9	1.7	2.1	2.1	5.7	3.8
CBO	2.6	1.7	2.3	2.3	4.8	3.9

SOURCES: Aspen Publishers, Inc., *Blue Chip Economic Indicators* (January 10, 2001, and August 10, 2001); DRI•WEFA, *The U.S. Economy* (January and August 2001); Macroeconomic Advisers, LLC, *Macroeconomic Advisers' Economic Outlook* (January 17, 2001, and August 17, 2001); and Congressional Budget Office.

a. Change from fourth quarter to fourth quarter.

deteriorate further this year as a result of weakness in foreign economies and the relative strength of the dollar.

Unemployment and Inflation

The modest economic growth projected over the next two years will limit how much employment expands and boost the unemployment rate slightly. CBO expects unemployment to rise from last year's unusually low rate of 4.0 percent to an average of 4.6 percent this year and 5.2 percent in 2002. And although the underlying rate of consumer price inflation has been edging up and overall labor costs per unit of output have increased in recent months, an upsurge in inflation is not a major concern. CBO thus anticipates that inflation, as measured by the CPI, will slow from its pace of 3.4 percent last year to 3.2 percent this year and 2.6 percent in 2002.

Several factors contribute to the benign inflation outlook. Energy prices are expected to moderate, reducing some of the pressure on the CPI. Growth in compensation is also likely to wane, at least slightly. Although the unemployment rate is still low compared with its level over the past 30 years, it has increased since the end of last year, and employment is growing more slowly than it did in recent years. Those trends are likely to dampen any surges in compensation in the near future, reducing the upward pressure on unit labor costs. In addition, much of the recent upswing in such costs is related to the economy's recent slowing and can be expected to dissipate once stronger economic growth resumes. Finally, excess productive capacity and a strong dollar are likely to limit firms' ability to pass higher costs along to their customers, should costs continue to rise. In sum, slackening energy prices, a climbing unemployment rate, and the likelihood of a rebound in the growth of labor productivity all point to moderate inflation and rising unit labor costs over the next two years.

Interest Rates

CBO does not anticipate large changes in interest rates in the near term. In light of the recent fall in short-term rates—a response to the Federal Reserve's

monetary policy and lower overall demand in the economy—CBO believes that the rate on three-month Treasury bills will average 3.9 percent in 2001 and 3.8 percent in 2002. Those rates are nearly two percentage points lower than last year's average of 5.8 percent. The rate on 10-year Treasury notes will vary a bit more widely, averaging 5.3 percent in 2001 and rising to 5.6 percent in 2002 as economic activity strengthens.

Sources of Uncertainty in the Short Term

On the whole, most observers of the economy appear to be more concerned about the short-term risk of a recession than about the possible resumption of rapid growth. There are several possible developments that, taken together, could contribute to a more serious slump than CBO currently anticipates. A major worry is that consumers will curtail their spending over the next few quarters more than forecasters expect and push the economy into a recession. Consumers may still be adjusting to past losses in the stock market, and their confidence in the economy, though nowhere near the low levels seen in past recessions, has fallen sharply. Rising unemployment could further dampen that confidence and cause consumers to retrench and cut their spending.

Another source of concern is the business sector. Recent overinvestment by businesses may have been even greater than is now thought, so the downturn in the demand for capital goods could persist longer than expected. Unit labor costs could also rise higher than current estimates are projecting, further constraining corporate profit margins. That pressure might cause firms to cut back even further on their investment plans and to absorb any additional reduction in demand by laying off workers—which could increase the forces operating to push down consumer spending.

Similarly, developments in foreign countries may help tip the U.S. economic balance toward recession. The economies of other nations may unravel more than forecasters now expect, in response to purely domestic factors, or weakened demand for imports in the United States, or both. A less robust global economy could lead to an even stronger dollar,

which would curtail U.S. exports and further reduce overall demand.

Of lesser concern to most observers is the possibility that fiscal and monetary stimulus could induce considerably faster growth than expected, resulting in more rapid inflation than CBO anticipates. The most recent measures of consumers' expectations suggest that they are increasingly optimistic about the near future. The slowdown in capital and inventory investment may be nearly over, and businesses may be on the verge of resuming such spending at close to their earlier high levels. Similarly, investors may become convinced that inflation is not rising, which could further encourage investment spending. The depreciation of the dollar this summer could accelerate, helping to raise the demand for domestically produced goods and services. Under any or all of those circumstances, the recent round of tax cuts and monetary easing could trigger a more rapid upturn of spending than is now expected.

There is even a small chance that economic growth could again exceed potential, leading to overheating. Despite the recent rise in unemployment, labor markets remain tight enough that an upsurge in the demand for labor could lead to a spike in wages and hikes in unit labor costs. If that occurred, domestic price inflation could accelerate beyond current expectations, forcing the Federal Reserve to raise interest rates again in an effort to curtail an inflationary spiral.

Comparison of Short-Term Forecasts

CBO's current short-term forecasts lie well within the "central tendency" estimates presented by the Federal Reserve in its report to the Congress in mid-July on monetary policy (see Table 2-4). CBO's forecast is also very similar to that of the August 2001 *Blue Chip* consensus, an average of roughly 50 private-sector forecasts (see Table 2-5). Appendix C compares CBO's forecasts and 10-year projections with those recently released by the Administration.

The Outlook Beyond 2002

To develop its medium-term projections for 2003 through 2011, CBO extends historical patterns in the factors that underlie the growth of potential GDP—factors such as the growth of the labor force, the growth of productivity, and the rate of national saving. In doing so, CBO does not attempt to forecast fluctuations in the business cycle beyond the next two years. However, it does take the possibility of such fluctuations into account in developing the medium-term trends.

Compared with its projections from January, CBO's estimate of average annual growth of real GDP for 2003 through 2011 is slightly higher now—3.2 percent versus 3.1 percent. However, CBO does not expect the level of real GDP to be higher in 2011 than it estimated last January. Rather, CBO believes that the current slowdown will bring actual real GDP down to its potential level in 2002 and that, on average, GDP will grow at its trend rate through 2011. In contrast, last January CBO expected actual real GDP to remain above its potential level for an extended period and to grow more slowly through 2011 as it gradually returned to its trend growth rate. Similarly, CBO's projection of average annual growth of nominal GDP is slightly higher—5.3 percent now versus 5.0 percent in January—but its projection of nominal GDP in 2011 is virtually identical to the level it forecast in January.

CBO projects that inflation as measured by the CPI will average 2.5 percent during the years after 2002—the same rate that it projected in January. CBO's current estimate of the average annual growth of the GDP price index—1.9 percent from 2002 through 2011—is also the same as in January. In developing those projections, CBO assumes that the inflation rate is determined by monetary policy over the medium term and that the Federal Reserve is likely to impose more restrictive monetary policies if the underlying rate of inflation rises much above 2.5 percent.

Table 2-4.
Comparison of Federal Reserve, CBO, and *Blue Chip* Midyear Economic Forecasts for 2001 and 2002

	Fourth Quarter to Fourth Quarter	
	2001	2002
Nominal GDP (Percentage change)		
Federal Reserve		
Range	3½ to 5	4¾ to 6
Central tendency	3½ to 4½	5 to 5½
CBO	4.1	5.4
<i>Blue Chip</i>	4.1	5.5
Real GDP (Percentage change)		
Federal Reserve		
Range	1 to 2	3 to 3½
Central tendency	1¼ to 2	3 to 3¼
CBO	1.7	3.1
<i>Blue Chip</i>	1.6	3.3
Personal Consumption Price Index^a (Percentage change)		
Federal Reserve		
Range	2 to 2¾	1½ to 3
Central tendency	2 to 2½	1¾ to 2½
CBO	2.3	2.4
<i>Blue Chip</i>	n.a.	n.a.
Consumer Price Index^b (Percentage change)		
Federal Reserve		
Range	n.a.	n.a.
Central tendency	n.a.	n.a.
CBO	3.0	2.7
<i>Blue Chip</i>	3.0	2.5
Unemployment Rate^c (Percent)		
Federal Reserve		
Range	4¾ to 5	4¾ to 5½
Central tendency	4¾ to 5	4¾ to 5¼
CBO	4.9	5.2
<i>Blue Chip</i>	4.9	4.8

SOURCES: Federal Reserve Board of Governors, *Monetary Report to the Congress*, July 18, 2001; Congressional Budget Office; and Aspen Publishers, Inc., *Blue Chip Economic Indicators* (August 10, 2001).

NOTE: n.a. = not applicable.

- a. Beginning with its February 2000 report, the Board of Governors of the Federal Reserve switched its measure of inflation from the consumer price index for all urban consumers (CPI-U) to the national income and product accounts' personal consumption price index. The board believes that the latter is the better measure of overall inflation.
- b. The consumer price index for all urban consumers.
- c. The unemployment rate is the average for the fourth quarter.

Changes in CBO's Estimate of Potential GDP

CBO has not revised its projection for the growth of potential GDP during the 2001-2011 period from its

January estimate of 3.3 percent (see Table 2-6). However, it has altered its view of the components of growth in a number of significant ways, even though the revisions offset one another when taken together. In part, the changes result from the Economic Growth

Table 2-5.
Comparison of CBO and *Blue Chip* Forecasts for 2001 and 2002

	Calendar Years	
	2001	2002
Nominal GDP (Percentage change)		
<i>Blue Chip</i> high 10	4.5	6.0
<i>Blue Chip</i> consensus	4.1	5.0
CBO	4.0	4.9
<i>Blue Chip</i> low 10	3.8	4.0
Real GDP (Percentage change)		
<i>Blue Chip</i> high 10	2.0	3.5
<i>Blue Chip</i> consensus	1.7	2.8
CBO	1.7	2.6
<i>Blue Chip</i> low 10	1.5	2.1
GDP Price Index (Percentage change)		
<i>Blue Chip</i> high 10	2.6	2.6
<i>Blue Chip</i> consensus	2.3	2.1
CBO	2.3	2.3
<i>Blue Chip</i> low 10	2.2	1.5
Consumer Price Index ^a (Percentage change)		
<i>Blue Chip</i> high 10	3.4	3.1
<i>Blue Chip</i> consensus	3.2	2.5
CBO	3.2	2.6
<i>Blue Chip</i> low 10	3.0	1.9
Unemployment Rate (Percent)		
<i>Blue Chip</i> high 10	4.7	5.5
<i>Blue Chip</i> consensus	4.6	4.9
CBO	4.6	5.2
<i>Blue Chip</i> low 10	4.5	4.4
Three-Month Treasury Bill Rate (Percent)		
<i>Blue Chip</i> high 10	4.0	4.4
<i>Blue Chip</i> consensus	3.8	3.7
CBO	3.9	3.8
<i>Blue Chip</i> low 10	3.7	3.1
Ten-Year Treasury Note Rate (Percent)		
<i>Blue Chip</i> high 10	5.4	6.0
<i>Blue Chip</i> consensus	5.2	5.5
CBO	5.3	5.6
<i>Blue Chip</i> low 10	4.1	5.1

SOURCES: Congressional Budget Office; Aspen Publishers, Inc., *Blue Chip Economic Indicators* (August 10, 2001).

NOTE: The *Blue Chip* high 10 is the average of the 10 highest *Blue Chip* forecasts; the *Blue Chip* consensus is the average of the nearly 50 individual *Blue Chip* forecasts; and the *Blue Chip* low 10 is the average of the 10 lowest *Blue Chip* forecasts.

a. The consumer price index for all urban consumers.

and Tax Relief Reconciliation Act of 2001, which introduces a variety of changes in tax law and also affects economic growth over the next decade (as discussed in Box 2-3).

Several other considerations have also influenced CBO's medium-term projections. Analysts develop those projections from estimates of future growth in hours worked by the labor force and in

Table 2-6.
Key Assumptions in CBO's Projection of Potential GDP (By calendar year, in percent)

	Average Annual Growth						Projected Average Annual Growth, 2001- 2011
	1951- 1973	1974- 1981	1982- 1990	1991- 1995	1996- 2000	1951- 2000	
Overall Economy							
Potential GDP	3.9	3.2	3.0	2.6	3.5	3.5	3.3
Potential Labor Force	1.6	2.5	1.6	1.1	1.2	1.7	1.1
Potential Labor Force Productivity ^a	2.2	0.7	1.4	1.5	2.3	1.8	2.1
Nonfarm Business Sector							
Potential Output	4.0	3.6	3.2	3.0	4.0	3.7	3.7
Potential Hours Worked	1.3	2.2	1.6	1.6	1.4	1.5	1.2
Capital Input	3.7	4.3	3.6	2.5	5.2	3.8	4.8
Potential Total Factor Productivity	2.0	0.8	1.0	1.1	1.5	1.5	1.4
Potential TFP excluding adjustments	2.0	0.7	1.0	1.1	1.1	1.4	1.1
TFP adjustments	0	0	0	0	0.4	0	0.3
Computer quality	0	0	0	0	0.1	0	0.2
Price measurement	0	0	0	0	0.2	0	0.2
Temporary adjustment ^b	0	0	0	0	0.1	0	0
Contributions to Growth of Potential Output (Percentage points)							
Potential hours worked	0.9	1.5	1.1	1.1	1.0	1.1	0.8
Capital input	1.1	1.3	1.1	0.8	1.5	1.1	1.5
Potential TFP	<u>2.0</u>	<u>0.8</u>	<u>1.0</u>	<u>1.1</u>	<u>1.5</u>	<u>1.5</u>	<u>1.4</u>
Total Contributions	4.0	3.6	3.2	2.9	4.0	3.7	3.7
Memorandum:							
Potential Labor Productivity ^c	2.7	1.4	1.6	1.4	2.6	2.1	2.5

SOURCE: Congressional Budget Office.

NOTE: CBO assumes that the growth rate of potential total factor productivity (TFP) changed after the business-cycle peaks of 1973, 1981, and 1990 and again after 1995.

- a. Potential GDP divided by the potential labor force.
- b. The temporary adjustment raises the growth of potential TFP during the 1996-2000 period to help make the estimate of potential GDP more compatible with the observed weakness of inflation. That adjustment is considered transitory, in the sense that although it has a permanent effect on the estimated *level* of potential TFP, its effect on the growth rate of TFP is temporary.
- c. Estimated trend in the ratio of output to hours worked in the nonfarm business sector.

labor productivity—that is, output per hour. Productivity growth in turn depends on capital deepening (increases in the amount of capital available per worker), on changes in the mix of capital in which investments are being made, and on growth of total factor productivity (the ability of workers to produce more output with a given amount of capital). For a

variety of reasons, CBO has revised each of those estimates.

Growth of the Labor Force. In CBO's new projection, potential hours worked in the nonfarm business sector grow at an average annual rate of 1.2 percent during the 2001-2011 period, which is nearly

0.1 percentage point faster than the rate projected in January. That change stems mainly from the results of the 2000 census, which suggest that during the past decade, the country's adult civilian population—and consequently the labor force—grew between 0.2 and 0.3 percentage points per year faster than had previously been estimated. Although CBO had anticipated, and to some degree incorporated, the revision in its January forecast, analysis of the census data suggested the need for further upward revisions to the rates projected for population and labor force growth. Therefore, CBO's current estimates of the expansion of both the potential labor force and potential hours worked incorporate a faster rate of growth than last January's projections did. They also take into account changes in tax law, which modestly increase the recent projections of the supply of labor (see Box 2-3).

Growth of Labor Productivity. In contrast to its higher estimate of labor force growth, CBO's projection of average annual growth in potential labor productivity during the 2001-2011 period—2.5 percent—is about 0.2 percentage points lower than its estimate from last January. That revision reflects changes in CBO's assumptions—mainly about the growth of investment but also about the composition of investment and the growth of total factor productivity.

Capital Deepening. Recent years have seen unusually high levels of investment: the share of nominal potential GDP going to nonresidential fixed investment in 2000 was the largest in the past 70 years. CBO expects that share to remain historically high, but it has lowered its medium-term projection slightly. Thus, the slower pace of business investment leads to lower average annual growth of future capital services—4.8 percent, on average, during the 2001-2011 period, down from the 5.2 percent projected last January.

The most important consideration in CBO's revision is that the recent economic slowdown has been particularly acute in the information technology sector of manufacturing. Indeed, many analysts have concluded that some of the investment in information technologies during the past few years was speculative and, in retrospect, unsustainable. One implication of that change in opinion is that after the current

slump ends, business investment over the next decade will be somewhat weaker than previously expected. CBO has thus followed other private forecasters in lowering its projection of business fixed investment during the 2001-2011 period, which results in slower accumulation of capital. In addition, the changes this year in tax law modestly reduce CBO's projection of investment by lowering national saving.

The current slump in investment directly affects projections of output as well, although only to a minor extent. Coming as it does at the very beginning of CBO's 10-year projection period, the slump will have a slightly larger influence on capital accumulation than would have been the case for the recession scenario that was part of CBO's January forecast. (That framework assumed that the slowdown would occur in the middle of the projection period rather than at the beginning.)

The Capital Mix. CBO has also revised its assumptions about the mix of capital in investment. January's forecast assumed that investment in information technologies could continue to grow without affecting the demand for other types of capital, pushing the share of GDP claimed by investment ever higher. It now appears that businesses, rather than tending to substitute investment in information technologies for labor, tend to substitute it for other types of investment. That view is strongly supported by the fact that labor's share of income in the nonfarm business and nonprofit sectors was the same in the first quarter of 2001 as it had been in the mid-1980s. If businesses were substituting investment in information technologies for labor, that share should have fallen.

Growth in Total Factor Productivity. CBO now expects potential total factor productivity (TFP) to rise by an average of 1.4 percent per year, or almost 0.1 percentage point slower than it forecast in January. That change is not the result of slower growth in the underlying trend—projected trend growth in TFP still averages 1.1 percent in the current projection, as it did in the January forecast. Instead, the contribution to overall TFP growth of improvements in the quality of computers is slightly smaller in CBO's new estimates, a consequence of the downward revision in the projection for investment. Since investment in computers is expected to make up a smaller portion of total output over the next decade, total fac-

tor productivity growth in the computer sector will make a smaller contribution to overall TFP growth relative to last January's forecast, even though computer quality is still projected to improve rapidly. Despite the downward revisions in the estimates of capital deepening and TFP growth, CBO still expects projected labor productivity growth to remain well above its post-1973 trend.

Sources of Uncertainty

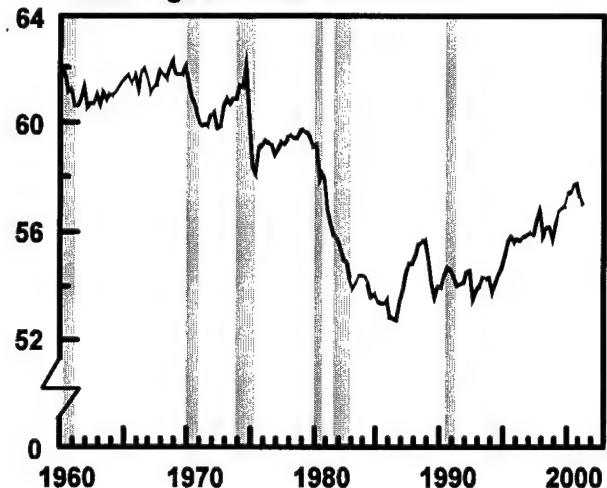
Most of the uncertainty about medium-term growth involves the pace of investment in information technologies. The increase in the growth rate of overall productivity in the late 1990s resulted both from greater capital deepening, mainly in the information technology sector, and from more rapid growth in total factor productivity, probably in large part the result of innovative uses of information technologies throughout the economy. The question now is what the pace of investment in information technologies will be over the medium term and the extent to which those investments will lead to significant cost savings in other sectors of the economy. However, neither the slowdown in productivity over the past few quarters nor the recently released downward revisions to the data for productivity growth in recent years suggest that the acceleration of productivity growth in the late 1990s has come to an end.

CBO's Tax-Base Projections

CBO's projections of federal revenues are closely connected not only to its projection of GDP but also to its projection of the relationship between GDP and its components—in particular, the components of income, such as wages and salaries and corporate profits. Because different components of national income are taxed at different rates and some are not taxed at all, the distribution of income among those

Figure 2-9.
Corporate Profits Plus Wages and Salaries

Percentage of Nominal GDP



SOURCES: Congressional Budget Office; Department of Commerce, Bureau of Economic Analysis.

NOTE: Corporate profits for the second quarter of 2001 are estimated by CBO.

constituent parts has a significant effect on CBO's revenue projections.

Wage and salary disbursements and corporate profits produce the most tax revenues. Together, those two categories of income rose sharply in the 1990s relative to GDP (see Figure 2-9). But the slowdown in the economy has caused their share of GDP to decline in the past few quarters, specifically because of the precipitous drop in profits. In CBO's projections, that share falls slightly further through 2011. The moderate constriction of that share over the next 10 years stems from an increase in the share of GDP going to depreciation over the 2003-2011 period. (Although investment has dropped sharply in recent quarters, the boom in investment during the past five years created a large capital stock that, in turn, enables firms to deduct growing amounts for depreciation from their taxable earnings.)

Appendices

Appendix A

The Federal Sector of the National Income and Product Accounts

The federal budget is not the only mechanism for gauging the effect of federal government revenues and spending on the economy. That effect is also measured in the official national income and product accounts (NIPAs) produced by the Commerce Department's Bureau of Economic Analysis (BEA). The NIPAs provide a picture of government activity in terms of production, distribution, and use of output. They recast the government's transactions into categories that affect gross domestic product (GDP), income, and other macroeconomic totals, thereby helping to trace the relationship between the federal sector and other areas of the economy.

Relationship Between the Budget and the NIPAs

A number of major differences distinguish the treatment of federal receipts and expenditures in the NIPAs from their treatment in the total, or unified, budget. For example, the NIPAs shift certain items from the spending to the receipt side of the ledger to reflect intrabudgetary or voluntary payments that the budget records as negative outlays. Such shifts are referred to as *netting and grossing* adjustments and do not affect the surplus or deficit (see Table A-1).

In contrast, other differences between the NIPAs and the federal budget do affect the surplus or deficit. The NIPA totals exclude government transactions that involve the transfer of existing assets and

liabilities and therefore do not contribute to current income and production. Prominent among such *lending and financial* adjustments are those for deposit insurance outlays, cash flows for direct loans made by the government before credit reform, and sales of government assets. Other factors that separate NIPA accounting from budget accounting include *geographic adjustments* (the exclusion of Puerto Rico, the Virgin Islands, and a few other areas from the national economic statistics) and *timing adjustments* (such as correcting for irregular numbers of benefit checks or shifts in the timing of corporate tax payments).

In the NIPAs, *contributions for government employee retirement* are considered the personal income of federal workers covered by the retirement funds. In the budget, those contributions are classified as government receipts. Therefore, on a NIPA basis, outlays from the funds are treated as transactions outside of the government sector of the economy.

Intragovernmental transfers are payments that the government makes to federal entities whose transactions are not counted within the budget. Nearly all such transfers involve the financing of credit programs.

Capital transfers, which include grants to state and local governments for highways, transit, air transportation, and water treatment plants, are transactions in which one party provides something (usually cash) to another without receiving anything in return. Those transactions are linked to, or are condi-

Table A-1.
Relationship of the Budget to the Federal Sector of the National Income and Product Accounts (By fiscal year, in billions of dollars)

	Actual 2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Receipts												
Revenue (Budget) ^a	2,025	2,011	2,134	2,196	2,307	2,438	2,543	2,663	2,801	2,952	3,103	3,341
Differences												
Netting and grossing												
Medicare premiums	22	24	27	30	33	37	40	43	47	51	56	61
Deposit insurance premiums	*	*	*	*	*	1	1	1	1	2	2	2
Government contributions for employee OASDI and HI	10	11	11	12	13	14	15	16	17	18	19	21
Other	12	15	13	10	6	6	4	4	4	3	3	2
Geographic adjustments	-3	-4	-4	-4	-4	-4	-4	-5	-5	-5	-5	-6
Contributions for employee retirement	-5	-4	-4	-4	-4	-4	-4	-4	-4	-4	-3	-3
Estate and gift taxes	-29	-29	-31	-26	-28	-27	-30	-28	-29	-31	-25	0
Universal Service Fund receipts	-5	-5	-6	-8	-13	-13	-13	-13	-13	-13	-13	-13
Corporate timing shift	0	33	-33	0	7	-7	0	0	0	0	0	0
Other	-16	9	8	10	8	4	3	3	4	6	7	5
Total Difference	-14	49	-18	21	18	7	11	19	23	27	40	69
Receipts (NIPAs)	2,012	2,059	2,115	2,217	2,326	2,445	2,554	2,682	2,824	2,979	3,143	3,410
Expenditures												
Outlays (Budget) ^a	1,789	1,858	1,958	2,024	2,106	2,194	2,254	2,323	2,413	2,502	2,596	2,713
Differences												
Netting and grossing												
Medicare premiums	22	24	27	30	33	37	40	43	47	51	56	61
Deposit insurance premiums	*	*	*	*	*	1	1	1	1	2	2	2
Government contributions for employee OASDI and HI	10	11	11	12	13	14	15	16	17	18	19	21
Other	12	15	13	10	6	6	4	4	4	3	3	2
Lending and financial adjustments	11	13	10	21	21	11	12	13	13	13	13	14
Geographic adjustments	-10	-11	-12	-12	-13	-13	-14	-14	-15	-16	-17	-17
Timing adjustments	-10	8	2	0	0	-12	3	9	0	0	0	-15
Contributions for employee retirement	33	35	38	38	40	41	43	44	46	47	49	51
Intragovernmental transfers	-3	7	-16	-16	-16	-14	-15	-15	-16	-16	-17	-17
Capital transfers	-35	-39	-42	-45	-46	-47	-48	-49	-49	-50	-51	-52
Treatment of investment and depreciation	-12	-14	-12	-15	-19	-22	-26	-29	-33	-37	-41	-44
Universal Service Fund payments	-4	-5	-6	-6	-12	-13	-13	-13	-13	-13	-13	-13
Other	7	-8	-6	-2	-2	-2	-2	-2	-2	-2	-2	-2
Total Difference	21	35	9	15	6	-14	*	7	*	1	2	-10
Expenditures (NIPAs)	1,809	1,893	1,967	2,040	2,112	2,180	2,254	2,330	2,413	2,503	2,598	2,703

(Continued)

Table A-1.
Continued

	Actual 2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Surplus												
Surplus (Budget) ^a	236	153	176	172	201	244	289	340	389	450	507	628
Differences												
Lending and financial adjustments	-11	-13	-10	-21	-21	-11	-12	-13	-13	-13	-13	-14
Geographic adjustments	7	8	8	8	9	9	9	10	10	11	11	12
Timing adjustments	10	25	-35	0	7	5	-3	-9	0	0	0	15
Contributions for employee retirement	-38	-39	-42	-42	-44	-45	-47	-48	-49	-51	-52	-54
Intragovernmental transfers	3	-7	16	16	16	14	15	15	16	16	17	17
Capital transfers	35	39	42	45	46	47	48	49	49	50	51	52
Treatment of investment and depreciation	12	14	12	15	19	22	26	29	33	37	41	44
Universal Service Fund payments	-1	*	*	-2	-1	*	*	*	*	*	*	0
Estate and gift taxes	-29	-29	-31	-26	-28	-27	-30	-28	-29	-31	-25	0
Other	-23	17	13	12	10	6	5	5	6	8	9	7
Total Difference	-34	14	-27	6	12	21	11	12	23	26	37	79
Surplus (NIPAs)	202	167	149	177	214	265	301	352	411	476	544	707

SOURCE: Congressional Budget Office.

NOTES: * = between -\$500 million and \$500 million.

OASDI = Old-Age, Survivors, and Disability Insurance; HI = Hospital Insurance.

a. Includes Social Security and the Postal Service.

tional upon, the acquisition or disposition of an asset. Because such transactions shift existing assets from one party to another, they do not affect disposable income or production in the current period and therefore are not counted in the NIPAs.

The NIPAs and the unified budget also differ in their *treatment of investment and depreciation*. The unified budget reflects all expenditures of the federal government, including investment purchases of items such as buildings and aircraft carriers. The NIPAs show the current, or operating, account for the federal government; thus, they exclude government investment and include the government's consumption

of fixed capital, or depreciation. (Government investment, although included in the calculation of GDP, is not part of the NIPA measure of federal expenditures.)

The Universal Service Fund, which is administered by a nonprofit entity, receives funds from all providers of telecommunications service and disburses them to those providers that serve high-cost areas, low-income households, libraries, and schools, as well as rural health care providers. As a result, the fund's receipts and payments are classified as intracorporate transfers and do not show up in the NIPAs.

NIPA Receipts and Expenditures

The federal sector of the NIPAs generally classifies receipts according to their source (see Table A-2). The leading source of government receipts in the 2001-2011 period is taxes and fees paid by individuals. Following that category are contributions (including premiums) for social insurance, such as Social Security, Medicare, unemployment insurance, and federal employees' retirement. The remaining categories of receipts are accruals of taxes on corporate profits, including the earnings of the Federal Reserve System, and accruals of indirect business taxes and nontax accruals (chiefly excise taxes and fees).

Government expenditures are classified according to their purpose and destination. Defense and nondefense consumption of goods and services represents purchases made by the government for immediate use. The largest share of current consumption is compensation of federal employees. Consumption of fixed capital is the use the government receives from its fixed assets.

Transfer payments are cash payments made directly to people or foreign nations. Grants-in-aid are payments that the federal government makes to state or local governments, which then use them for transfers (such as paying Medicaid benefits), consumption (such as hiring additional police officers), or investment (such as building highways).

Although both the total budget and the NIPAs contain a category labeled "net interest," the NIPA figure is larger. Various differences cause the two measures to diverge. The largest difference is the contrasting treatment of interest received by the Civil Service and Military Retirement funds. In the total budget, such receipts offset the payments made by the Treasury. In the NIPAs, however, those receipts are reclassified as contributions to personal income and do not appear on the government's ledger.

The NIPA category labeled "subsidies less current surplus of government enterprises" contains two components, as its name suggests. The first—subsidies—is defined as monetary grants paid by government to businesses, including state and local government enterprises. Subsidies are dominated by housing assistance.

The second part of the category is the current surplus of government enterprises, which are certain business-type operations of the government, such as the Postal Service. The operating costs of government enterprises are mostly covered by the sale of goods and services to the public rather than by tax receipts. The difference between sales and current operating expenses is the enterprise's surplus or deficit. *Government enterprises* should not be confused with *government-sponsored enterprises* (GSEs), which are private entities established and chartered by the federal government to perform specific financial functions, usually under the supervision of a government agency. Examples of GSEs include Fannie Mae and the Farm Credit System. As privately owned, though publicly chartered, corporations, GSEs are not included in the budget or in the federal sector of the NIPAs.

Table A-2.

Projections of Baseline Receipts and Expenditures Measured by the National Income and Product Accounts (By fiscal year, in billions of dollars)

	Actual 2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Receipts												
Personal Tax and Nontax Receipts	983	1,016	1,033	1,073	1,117	1,167	1,216	1,278	1,351	1,431	1,517	1,705
Contributions for Social Insurance	681	721	763	801	838	886	932	980	1,029	1,082	1,138	1,197
Corporate Profit Tax Accruals	238	209	203	225	250	267	279	293	309	326	342	358
Indirect Business Tax and Nontax Accruals	110	113	116	119	120	124	128	131	136	140	145	150
Total	2,012	2,059	2,115	2,217	2,326	2,445	2,554	2,682	2,824	2,979	3,143	3,410
Expenditures												
Purchases of Goods and Services												
Defense												
Consumption	256	270	282	291	300	308	317	325	334	344	353	362
Consumption of fixed capital	65	66	67	68	68	68	69	69	69	70	71	71
Nondefense												
Consumption	141	140	153	161	165	168	170	174	178	182	186	191
Consumption of fixed capital	27	31	33	35	38	40	42	44	46	48	50	52
Subtotal	489	507	536	555	570	585	598	612	628	644	660	677
Transfer Payments												
Domestic	755	807	865	909	956	1,005	1,064	1,123	1,186	1,258	1,335	1,422
Foreign	12	11	10	10	10	10	10	10	10	10	10	10
Subtotal	768	818	875	919	966	1,015	1,073	1,133	1,196	1,267	1,345	1,431
Grants-in-Aid to State and Local Governments												
Net Interest ^a	243	273	295	313	328	344	361	380	401	424	450	478
Subsidies Less Current Surplus of Government Enterprises	264	247	221	214	209	197	182	165	147	125	100	72
Subtotal	46	47	39	38	39	40	40	40	41	42	43	44
Total	1,809	1,893	1,967	2,040	2,112	2,180	2,254	2,330	2,413	2,503	2,598	2,703
Surplus												
Surplus ^a	202	167	149	177	214	265	301	352	411	476	544	707

SOURCE: Congressional Budget Office.

a. Includes Social Security and the Postal Service.

Table B-2.
CBO's Year-by-Year Economic Forecasts and Projections for Fiscal Years 2001 Through 2011

	Forecast		Projected								
	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Nominal GDP (Billions of dollars)	10,263	10,733	11,322	11,913	12,533	13,187	13,870	14,584	15,333	16,117	16,935
Nominal GDP (Percentage change)	4.5	4.6	5.5	5.2	5.2	5.2	5.2	5.1	5.1	5.1	5.1
Real GDP (Percentage change)	2.2	2.3	3.2	3.2	3.2	3.3	3.2	3.2	3.2	3.2	3.2
GDP Price Index (Percentage change)	2.3	2.2	2.2	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9
Consumer Price Index ^a (Percentage change)	3.3	2.7	2.7	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
Employment Cost Index ^b (Percentage change)	4.0	4.6	4.1	3.8	3.5	3.5	3.6	3.6	3.6	3.6	3.6
Unemployment Rate (Percent)	4.4	5.1	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2
Three-Month Treasury Bill Rate (Percent)	4.5	3.6	4.7	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9
Ten-Year Treasury Note Rate (Percent)	5.4	5.5	5.7	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8
Tax Bases (Billions of dollars)											
Corporate book profits	840	809	872	961	1,022	1,064	1,117	1,179	1,247	1,308	1,377
Wages and salaries	4,974	5,250	5,517	5,768	6,051	6,362	6,686	7,025	7,381	7,753	8,142
Tax Bases (Percentage of GDP)											
Corporate book profits	8.2	7.5	7.7	8.1	8.2	8.1	8.1	8.1	8.1	8.1	8.1
Wages and salaries	48.5	48.9	48.7	48.4	48.3	48.2	48.2	48.2	48.1	48.1	48.1

SOURCE: Congressional Budget Office.

NOTES: The August 2001 values for GDP and its components are based on data from the national income and product accounts before the July 2001 revision.

Percentage changes are year over year.

- a. The consumer price index for all urban consumers.
- b. The employment cost index is a measure of wages for private-industry workers.

Appendix C

Comparing CBO's and the Administration's Budget and Economic Projections

On August 22, 2001, the Administration issued its *Mid-Session Review*, which updates its baseline budget projections (also known as current-services projections) and economic assumptions for 2002 through 2011. Assuming that revenues and mandatory spending continue to be governed by current laws and that discretionary appropriations keep pace with inflation, the Administration's Office of Management and Budget (OMB) projects that the total surplus will climb steadily through 2011. Such projections are similar, though not identical, to those presented by the Congressional Budget Office (CBO) in Chapter 1 of this volume. (Table C-1 compares OMB's and CBO's projections.)

The economic perspectives of OMB and CBO are generally quite similar as well, but the differences in those outlooks account for a large part of the variance between the two agencies' budget projections. The Administration's current economic projections anticipate stronger near-term growth than CBO's projections do, with a sharp improvement in economic conditions by the end of this year. As a result, corporate profits in the Administration's forecast return to recent levels almost immediately, and the unemployment rate remains below 5 percent (see Table C-2 on page 60). By contrast, in CBO's forecast, profits remain weak in the near term, and the unemployment rate rises to 5.2 percent by the end of 2002. After 2002, the Administration's projections of nominal gross domestic product (GDP) and of tax bases (such as corporate profits and wages and salaries) remain slightly stronger than CBO's. Throughout most of the period, the Administration anticipates significantly lower interest rates on Treasury securities than

CBO does, although the implications of that difference for the budget are limited at a time when publicly held debt is being paid down.

For 2001, CBO estimates a small on-budget deficit while OMB estimates a small on-budget surplus; the difference in the two numbers is about \$10 billion. Conversely, CBO's estimate of the off-budget surplus for 2001 is nearly \$6 billion larger than OMB's, resulting in a net difference of \$5 billion. Most of the variance in on- and off-budget estimates stems from an accounting change proposed by OMB that would shift some revenues out of the off-budget category and into the on-budget total without altering the surplus. (Footnote 2 on page 3 provides further explanation.)

Although both CBO and OMB project large surpluses over the next 10 years, those projections differ in certain respects. CBO's estimates are lower in each year of the budget period—as much as \$60 billion lower in 2005. Differences between the projections taper off until 2009 and then climb again, to \$58 billion in 2011. Over the 10-year period from 2002 through 2011, CBO projects total surpluses that accumulate to \$445 billion less than OMB anticipates (see Table C-1). Although that discrepancy may seem large, it results from differences of just 1.0 percent in total projected revenues for the period and 0.7 percent in total projected outlays. CBO's estimate of the cumulative on-budget surplus is \$456 billion lower than OMB's; in contrast, CBO's projection of the cumulative off-budget surplus is \$11 billion higher than OMB's corresponding figure.

Table C-1.
**Comparison of CBO's August 2001 Baseline with OMB's Current-Services Baseline
(By fiscal year, in billions of dollars)**

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	Total, 2002- 2011
CBO's August 2001 Baseline												
Revenues	2,011	2,134	2,196	2,307	2,438	2,543	2,663	2,801	2,952	3,103	3,341	26,479
On-budget	1,503	1,602	1,638	1,723	1,822	1,897	1,985	2,089	2,204	2,319	2,518	19,795
Off-budget	507	532	558	584	616	647	679	712	748	785	823	6,684
Outlays												
Discretionary	647	689	717	737	759	774	789	812	833	853	878	7,842
Mandatory	1,003	1,089	1,134	1,201	1,280	1,342	1,412	1,500	1,592	1,691	1,813	14,053
Net interest and proceeds earned on the balance of uncommitted funds ^a	207	179	174	168	155	139	121	101	78	51	21	1,187
Total	1,858	1,958	2,024	2,106	2,194	2,254	2,323	2,413	2,502	2,596	2,713	23,083
On-budget	1,512	1,600	1,656	1,726	1,802	1,850	1,906	1,983	2,057	2,134	2,235	18,948
Off-budget	346	358	369	380	392	405	417	430	445	462	478	4,135
Surplus or Deficit (-)	153	176	172	201	244	289	340	389	450	507	628	3,397
On-budget	-9	2	-18	-3	21	47	78	106	147	184	283	847
Off-budget	162	174	190	204	224	242	262	283	303	323	345	2,549
Current-Services Baseline from OMB's Mid-Session Review												
Revenues	2,013	2,135	2,222	2,334	2,476	2,573	2,693	2,827	2,973	3,143	3,383	26,758
On-budget	1,511	1,608	1,660	1,742	1,846	1,915	2,002	2,103	2,215	2,344	2,543	19,978
Off-budget	502	527	561	592	630	658	691	723	757	799	841	6,780
Outlays												
Discretionary	651	686	713	735	757	774	792	816	838	861	889	7,859
Mandatory	999	1,083	1,125	1,186	1,268	1,326	1,401	1,486	1,577	1,676	1,789	13,917
Net interest and proceeds earned on the balance of uncommitted funds ^a	204	180	173	163	147	131	113	94	72	48	20	1,140
Total	1,855	1,949	2,011	2,084	2,172	2,231	2,305	2,396	2,487	2,584	2,697	22,916
On-budget	1,509	1,590	1,642	1,703	1,778	1,823	1,879	1,953	2,024	2,097	2,185	18,674
Off-budget	346	358	369	381	394	408	426	443	463	488	512	4,242
Surplus	158	187	210	250	304	342	388	431	485	559	686	3,842
On-budget	2	18	18	39	68	92	122	150	191	247	358	1,304
Off-budget	156	169	192	211	236	250	266	281	294	311	329	2,538

(Continued)

CBO's estimate of baseline revenues from 2002 through 2011 is lower than OMB's by \$279 billion (compared with projected total revenues of over \$26 trillion for the 10-year period). The two agencies' forecasts of revenues for 2001 and 2002 are very close because the Administration's more optimistic economic assumptions for 2002 are offset by lower estimates of the amount of tax receipts that given levels of income produce. In later years, however, economic differences accumulate. The Administration projects slightly higher growth in nominal GDP than

does CBO; it also anticipates that corporate profits and wages and salaries, the tax bases that generate the most revenue, will account for a larger share of income than CBO projects.

CBO and OMB differ by about \$180 billion in their estimates of revenues from on-budget sources over the 2002-2011 period. The two agencies' projections of off-budget tax receipts diverge by a smaller amount; CBO's estimates over the 10 years are nearly \$100 billion lower than OMB's. Much of

Table C-1.
Continued

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	Total, 2002- 2011
Difference (CBO minus OMB)												
Revenues	-2	-1	-26	-26	-38	-30	-30	-25	-21	-40	-42	-279
On-budget	-7	-7	-23	-18	-24	-18	-17	-15	-11	-25	-25	-182
Off-budget	5	5	-3	-8	-14	-12	-13	-11	-9	-14	-17	-96
Outlays												
Discretionary	-4	4	4	3	2	*	-2	-4	-6	-8	-10	-18
Mandatory	4	6	9	14	12	15	12	13	14	16	24	137
Net interest and proceeds earned on the balance of uncommitted funds ^a	3	-1	*	6	8	8	7	6	4	2	47	
Total	3	9	13	22	22	23	18	17	15	12	16	167
On-budget	3	10	13	23	24	27	27	30	33	38	50	274
Off-budget	-1	*	*	-1	-2	-4	-9	-13	-18	-26	-34	-107
Surplus or Deficit	-5	-11	-39	-49	-60	-53	-48	-42	-35	-51	-58	-445
On-budget	-10	-16	-36	-42	-47	-45	-44	-44	-44	-63	-75	-456
Off-budget	6	6	-3	-7	-12	-8	-4	2	9	11	17	11

SOURCES: Congressional Budget Office; Office of Management and Budget.

NOTE: * = between -\$500 million and \$500 million.

a. "Uncommitted funds" is CBO's term for the surpluses that remain each year after paying down publicly held debt available for redemption. CBO assumes that those funds, which accumulate from one year to the next, earn proceeds at a rate equal to the average interest rate projected for Treasury bills and notes.

that difference occurs because CBO attributes a lower proportion of national income to wages and salaries.

On the spending side, CBO's estimates of baseline outlays are \$167 billion higher than the Administration's for the 2002-2011 period (compared with projected total outlays of about \$23 trillion over that time). Approximately \$50 billion of the difference comes from CBO's estimates of bigger net interest payments as a result of the higher interest rates and levels of debt that it projects over the next 10 years.

Total discretionary spending under CBO's baseline is similar to the amount estimated by the Administration. Over the 10-year period, the total difference between the two projections is only \$18 billion. Early in the period, CBO uses higher inflation rates than OMB does (measured by the employment cost index for wages and salaries and the GDP deflator) to adjust budget authority in the future. Later, OMB's

estimates of inflation rates are higher, and so are its projections of discretionary spending.

For defense discretionary spending, CBO's estimate of outlays for 2002 exceeds the Administration's by about \$6 billion—continuing a recent pattern in which CBO's estimates of defense spending for the budget year have exceeded those of the Administration. (Historically, both agencies' estimates have usually been too low.) For nondefense discretionary spending, by contrast, CBO's estimate of outlays for 2002 is \$2 billion lower than OMB's and, like its estimate for 2001, reflects CBO's expectation that some agencies will spend funds more slowly than the Administration anticipates.

In the mandatory spending category, CBO projects that outlays over the 2002-2011 period will be about \$137 billion (or 1 percent) higher than OMB estimates. Of the factors contributing to that difference, Medicare is the largest. CBO estimates that the

Table C-2.
Comparison of CBO's and the Administration's Economic Projections for
Calendar Years 2001 Through 2011

	Forecast		Projected Annual Average	
	2001	2002	2003-2006	2007-2011
Nominal GDP (Billions of dollars)				
CBO	10,366	10,876	13,355 ^a	17,145 ^b
Administration	10,364	10,937	13,553 ^a	17,488 ^b
Nominal GDP (Percentage change)				
CBO	4.0	4.9	5.3	5.1
Administration	4.0	5.5	5.5	5.2
Real GDP (Percentage change)				
CBO	1.7	2.6	3.2	3.2
Administration	1.7	3.2	3.3	3.1
GDP Price Index (Percentage change)				
CBO	2.3	2.3	2.0	1.9
Administration	2.3	2.2	2.1	2.1
Consumer Price Index ^c (Percentage change)				
CBO	3.2	2.6	2.5	2.5
Administration	3.3	2.7	2.5	2.5
Unemployment Rate (Percent)				
CBO	4.6	5.2	5.2	5.2
Administration	4.6	4.8	4.6	4.6
Three-Month Treasury Bill Rate (Percent)				
CBO	3.9	3.8	4.9	4.9
Administration	3.8	3.9	4.3	4.3
Ten-Year Treasury Note Rate (Percent)				
CBO	5.3	5.6	5.8	5.8
Administration	5.2	5.2	5.2	5.2
Tax Bases (Percentage of GDP)				
Corporate book profits				
CBO	7.9	7.5	8.0	8.1
Administration	7.7	8.9	8.9	8.0
Wages and salaries				
CBO	48.6	48.9	48.4	48.1
Administration	48.1	48.2	48.6	48.1

SOURCES: Congressional Budget Office; Office of Management and Budget.

NOTES: CBO's values for GDP and its components are based on data from the national income and product accounts before the July 2001 revision.

Percentage changes are year over year.

CBO's year-by-year economic projections for calendar years 2001 through 2011 appear in Appendix B.

- a. Level of GDP in 2006.
- b. Level of GDP in 2011.
- c. The consumer price index for all urban consumers.

program's outlays will be about \$228 billion higher than OMB anticipates over the 10-year period. That variance arises mainly because CBO assumes that Medicare will serve a larger number of disabled enrollees than OMB projects.

CBO's estimate of Social Security outlays is \$39 billion lower than OMB's for the projection period. Almost all of the difference, amounting to 1.4 percent of total Social Security spending, is in the second five years (2007 through 2011). The two agencies barely differ in their assumptions about future cost-of-living adjustments. Slightly higher caseloads and slightly faster growth in the average benefit explain the increased spending that the Administration forecasts.

Discrepancies between CBO's and OMB's projections of net interest (including the proceeds earned on uncommitted funds) result from different expectations about future interest rates and different assumptions about levels of federal debt. CBO's estimates of short-term interest rates approximate those of OMB in the near term and are 0.6 percentage points higher in later years; its projections of long-term rates are higher than OMB's throughout the 10-year period. In turn, CBO's lower projections of surpluses through 2011, relative to those of OMB, result in higher estimates of debt in the future. The combination of higher interest rates and more debt leads to projected net interest costs over the 2002-2011 period that are \$47 billion higher under CBO's baseline than under OMB's.

Appendix D

Major Contributors to the Revenue and Spending Projections

The following Congressional Budget Office analysts prepared the revenue and spending projections in this report:

Revenue Projections

Mark Booth	Revenue forecasting
Barbara Edwards	Individual income taxes
Ed Harris	Social insurance taxes
Carolyn Lynch	Corporate income taxes, Federal Reserve System earnings
Rob McClelland	Estate and gift taxes
Larry Ozanne	Capital gains realizations
Andrew Shaw	Excise taxes
David Weiner	Revenue modeling
Erin Whitaker	Customs duties, miscellaneous receipts

Spending Projections

Defense, International Affairs, and Veterans' Affairs

Jo Ann Vines	Unit Chief
Kent Christensen	Defense
Sunita D'Monte	International affairs (conduct of foreign affairs and information exchange activities), veterans' housing
Raymond Hall	Defense (Navy weapons, missile defenses, atomic energy defense)
Sarah Jennings	Military retirement, veterans' education
Sam Papenfuss	Veterans' health care, military health care
Michelle Patterson	Veterans' compensation and pensions
Dawn Sauter Regan	Defense (military personnel)
Matt Schmit	Intelligence programs, defense acquisition reform
Joseph Whitehill	International affairs (development, security, international financial institutions)

Health

Tom Bradley	Unit Chief
Alexis Ahlstrom	Medicare, Public Health Service, Federal Employees Health Benefits program
Charles Betley	Medicare, Federal Employees Health Benefits program
Niall Brennan	Medicare, Public Health Service
Julia Christensen	Medicare, Public Health Service
Jeanne De Sa	Medicaid, State Children's Health Insurance Program
Mara Krause	Medicare, Public Health Service
Eric Rollins	Medicaid, State Children's Health Insurance Program
Christopher Topoleski	Medicare, Public Health Service

Human Resources

Paul Cullinan	Unit Chief
Valerie Baxter	Food Stamps, child nutrition, child care, low-income home energy assistance
Chad Chirico	Housing assistance
Sheila Dacey	Child Support Enforcement, Temporary Assistance for Needy Families
Geoff Gerhardt	Federal civilian retirement, Supplemental Security Income, child and family services
Deborah Kalcevic	Education
Tami Ohler	Pension Benefit Guaranty Corporation
Kathy Ruffing	Social Security
Christi Hawley Sadoti	Unemployment insurance, training programs, programs for the elderly, arts and humanities, foster care
Donna Wong	Elementary and secondary education, Pell grants, child and family services

Natural and Physical Resources

Kim Cawley	Unit Chief
Megan Carroll	Conservation and land management
Lisa Cash Driskill	Energy, Outer Continental Shelf receipts
Mark Grabowicz	Justice, Postal Service, general government
Kathleen Gramp	Spectrum auction receipts, energy, science, and space
Mark Hadley	Deposit insurance, credit unions, air transportation
Greg Hitz	Agriculture
David Hull	Agriculture
Ken Johnson	Commerce, Small Business Administration, Universal Service Fund
James Langley	Agriculture
Susanne Mehlman	Pollution control and abatement, Federal Housing Administration and other housing credit programs
Julie Middleton	Water resources, Federal Emergency Management Agency
Rachel Milberg	Highways, Amtrak, mass transit
Deborah Reis	Recreation, water transportation, community development, other natural resources, legislative branch
Lanette Keith Walker	Justice, regional development, Bureau of Indian Affairs

Other

Janet Airis	Unit Chief, Scorekeeping
Jeff Holland	Unit Chief, Projections
David Sanders	Unit Chief, Computer Support
Edward Blau	Authorization bills
Barry Blom	National income and product accounts, monthly Treasury data
Joanna Capps	Appropriation bills (Agriculture, Interior)
Sandy Davis	Budget process
Adaeze Enekwechi	Economic assumptions, budget aggregates
Kenneth Farris	Computer support
Mary Froehlich	Computer support
Ellen Hays	Federal pay
Catherine Little	Appropriation bills (VA-HUD, Treasury)
Felix LoStracco	Other interest, discretionary spending
Virginia Myers	Appropriation bills (Commerce-Justice-State, foreign operations)
Robert Sempsey	Appropriation bills (Labor-HHS, Transportation, military construction)
Amy Wendholt	Appropriation bills (Defense, energy and water)
Jina Yoon	Net interest on the public debt